

&lt;400&gt; 2508

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro  
 1 5 10 15  
 Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe  
 20 25 30  
 His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg  
 35 40 45  
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn  
 50 55 60  
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His  
 65 70 75 80  
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys  
 85 90 95  
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys  
 100 105 110  
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser  
 115 120 125  
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn  
 130 135 140  
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala  
 145 150 155 160  
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp  
 165 170 175  
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys  
 180 185 190  
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His  
 195 200 205  
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser  
 210 215 220  
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly  
 225 230 235 240  
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu  
 245 250 255  
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg  
 260 265 270  
 Gly Gly Gly Val Arg Glu  
 275

&lt;210&gt; 2509

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

gccggccttg acctggggccg ggcgatggct ccacggcaag gtccaataact ccgtgcgctt  
 60  
 gtggcgctgg acttcgtcga tgcccgcgag gttttgctgc ccgcgaccat tggactggac  
 120  
 gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga  
 180  
 cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc  
 240  
 caccgctccc agcggaatct cgtagactta gcgccagggt tggttaaggcg tgtagcggtc  
 300

gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg  
348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

Met	Ala	Pro	Arg	Gln	Gly	Pro	Ile	Leu	Arg	Ala	Leu	Val	Ala	Leu	Asp
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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
			20					25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
		35					40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50					55					60				
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70				75					80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
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Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
				100				105							

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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120  
cctgtcatcg cacacgtcgg ttatccgcag gccgccgacg agtattacca gttgctttta  
180  
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt  
240  
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatectctc  
300  
gaggggaactc ccacgcgat ggatggatcg tggcagctgc atcgccgtcg agcggcccct  
360  
gagccagttc ggttcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatgggtg  
420  
ggcgacgcca tcatcatcaa aatgttccgc cgcctggagc ccggcgacaa ccttgacatc  
480  
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt  
540  
atgtccggac agatccccgc tgaggaacac atcccggctg atctagctat gatcattgag  
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660  
gac  
663

<210> 2512  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2512  
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 20 25 30  
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr  
 35 40 45  
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro  
 50 55 60  
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe  
 65 70 75 80  
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala  
 85 90 95  
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln  
 100 105 110  
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg  
 115 120 125  
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile  
 130 135 140  
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile  
 145 150 155 160  
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr  
 165 170 175  
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro  
 180 185 190  
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly  
 195 200 205  
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp  
 210 215 220

<210> 2513  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2513  
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 120  
 gacctgaagt tctgcatgga tggagtccag actgctttga ggagtgaaga ttatgagcag  
 180  
 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggtcattga gctcagccga  
 240  
 cagggcaaaag agggtcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct  
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 gcaggaagct gagcaacgtc tcaaagccat tgtggcagag aagtttgcca ttgccaccaa  
 360

ggaagggtg  
368

<210> 2514  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2514  
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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala  
20 25 30  
Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly  
35 40 45  
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His  
50 55 60  
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg  
65 70 75 80  
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp  
85 90

<210> 2515  
<211> 351  
<212> DNA  
<213> Homo sapiens

<400> 2515  
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gtcctatcctg gaccagaccc ttcctacccc tccaactccc caacaactgg gcaattggaa  
120  
tatcagtcca tcctaaaaag ccaaccaggc tctcccaggg gaggcaggaa atccctgctc  
180  
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct  
240  
ctgggtgcag gtgggcagac aatgggccaa cacaccccct cagccccgct ccagtatcag  
300  
cattccagac ccaccacact gggcccttgg tcaccgggag acctcacgag t  
351

<210> 2516  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 2516  
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr  
1 5 10 15  
Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser  
20 25 30  
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn  
35 40 45  
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala



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      50              55              60
Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
65              70              75              80
Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
      85              90              95
Thr Arg

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<210> 2517  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

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<400> 2517
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ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga
120
cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg
180
aggccacaca ttccctgggg actgagctcc aaggtgctgg gtccttgagc aggaagcggc
240
cagtgttgag tgggcagtgt ctactccag cccctccttc ccaggccagt tcttctcatc
300
tccttcagtc ttccccaagc aggcctcat ctacaggga gacctgactg gctagc
356

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<210> 2518  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

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<400> 2518
Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu
1              5              10              15
Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
      20              25              30
Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
      35              40              45
Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
      50              55              60
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
65              70              75              80
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
      85              90              95
Pro Ser Ser Thr Gly Gln Thr
      100

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<210> 2519  
 <211> 830  
 <212> DNA  
 <213> Homo sapiens

<400> 2519

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 120  
 tctccatctg ctctgggact ctggcctgct gcttctcttg cctgccactc cccaaccccg  
 180  
 tttctctctc tgaaaactgg agctacacct gcccacaacag ggacagaatta ccttaaattg  
 240  
 cacaagacaa ttgcacagca gaccacactc ttctccaaag ttttcagggc ccaaaccag  
 300  
 acacctcctt gcaggactca tggctaccgt gggctcgcac caccagcctc cccatgcgtt  
 360  
 ttcttgccctc tgcttttgcct caatctgctc aatgacagaa acgcgacaac agagggcact  
 420  
 ttctccaaac ccagctctcc ctgcaggctc ccactctgct gctcacgctg aggccactct  
 480  
 accctgcctt ccgcagctca caggcagacc tggagcccag tgactacagg gttggcctcc  
 540  
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 660  
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 720  
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 780  
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 830

&lt;210&gt; 2520

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2520

Met	Ser	Pro	Ala	Arg	Arg	Cys	Leu	Gly	Leu	Gly	Pro	Glu	Asn	Phe	Gly
1				5				10					15		
Glu	Glu	Val	Gly	Leu	Leu	Cys	Asn	Cys	Leu	Val	Pro	Phe	Lys	Val	Ile
			20				25					30			
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40					45				
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln	Ser
		50				55				60					
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg	Gln
65					70				75					80	
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg	Leu
			85					90					95		
Arg	Gly	Ala	Val	Leu	Pro	Arg	Arg	Leu	Thr	Gly					
			100					105							

&lt;210&gt; 2521

&lt;211&gt; 4291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2521  
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120  
acactctctc tggcggtctc cccatgctcc ggggcagcca ccccaacccc ctccctgccc  
180  
ctcccccg ccaatgacag cgacaccagc acagggggct gccaggggtc ctaccgctgc  
240  
cagccggggg tgctgctgcc cgtgtgggag cccgacgacc cgtcgctggg tgacaaggcg  
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420  
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480  
aacctcacgc tcatggccct gggctcctcc gcacctgaga tcctgctgtc agtcatcgaa  
540  
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600  
gccttcaaca tgtttgtggt catcgccgtg tgcatctacg tcatcccagc cggcgagagc  
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720  
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960  
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 3240  
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 3600  
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 3840  
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 4291

&lt;210&gt; 2522

&lt;211&gt; 952

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2522

Leu	Ser	Leu	Phe	Arg	Ala	Glu	Ser	Pro	Thr	Thr	Ala	Ser	Pro	Ala	Leu
1			5						10				15		
Gly	Gly	Pro	Ala	Pro	Gly	Cys	Ser	Arg	Arg	Thr	Pro	Pro	Pro	Pro	Met
		20						25				30			
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
		35				40						45			
Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
		50				55					60				
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

65					70					75					80
Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser	Leu
				85					90					95	
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val	Tyr
			100					105					110		
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala	Ile
		115					120					125			
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala	Asn
	130					135					140				
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val	Ser
145					150					155					160
Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu	Leu
			165					170						175	
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu	Gly
			180					185					190		
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val	Ile
		195					200					205			
Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile	Lys
	210					215					220				
His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala	Tyr
225				230						235					240
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val	Gln
			245						250					255	
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val	Val
			260					265					270		
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val	Tyr
		275					280					285			
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala	Glu
	290					295					300				
Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly	Ala
305				310						315					320
Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu	Ala
			325						330					335	
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys	Asp
		340						345					350		
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly	Ile
	355					360						365			
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe	Tyr
	370					375					380				
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu	Arg
385				390						395					400
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly	Ala
			405						410					415	
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro	Ser
		420						425					430		
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val	Thr
	435					440						445			
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg	Thr
	450					455					460				
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu	Gly
465				470						475					480
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile	Gly
			485						490					495	
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val	Arg

[illegible]

930 935 940  
Ala Tyr Cys His Ile Arg Gly Phe  
945 950

<210> 2523  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2523  
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ttcagccgaa aaattgttgg tgttgctaca cgctcgacga tgcgtaccga tgcgtgccc  
120  
atggaggctt tggagcatgc gttaacgact gcaggggcgaa ttcattggaaa ccagttaatt  
180  
caccatagcg atcggggcgag ccagtacgtg tcactgaagt attccaccgc gtttagcgga  
240  
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa  
300  
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc  
360  
ggagaagtcg aattggccac cttgcggnnn nn  
392

<210> 2524  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2524  
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe  
1 5 10 15  
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser  
20 25 30  
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu  
35 40 45  
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp  
50 55 60  
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu  
65 70 75 80  
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn  
85 90 95  
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His  
100 105 110  
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu  
115 120 125  
Arg Xaa  
130

<210> 2525  
<211> 378  
<212> DNA  
<213> Homo sapiens



&lt;400&gt; 2525

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 60  
 tcccccttga atacgtggtg ctgtcaccgc cgcgggaatc aagaaccgca cgttgcgcaa  
 120  
 atcgctgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa  
 180  
 tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggttg  
 240  
 gaagtcagcg gtgcgcccgc acgcctgcga tttcgggtga agacgcgca ctaccattca  
 300  
 gaactggtgg ccgcaacact cattcgcagc gagaagccc cggatttgcc caacacctat  
 360  
 caatacggcg tggaattc  
 378

&lt;210&gt; 2526

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
1			5					10					15		
Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
			20					25				30			
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
			35				40					45			
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
			50				55				60				
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65					70				75					80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
				85				90					95		
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
			100					105					110		

&lt;210&gt; 2527

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2527

ntgggtcacct tccgaatggg acggcgggcc aaacccgaga tcatggccag caaagagcag  
 60  
 cagatccaga gagacgacct tggagccagt cccagagca gcagccagcc agaccacggc  
 120  
 cgccctctccc cccagaagc tcccgcaggg cccaccatct ccacggcctc cgagacctca  
 180  
 gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttcgtgtg  
 240  
 gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcgc catcccccca  
 300

cgcgt  
305

<210> 2528  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2528  
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala  
1 5 10 15  
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln  
20 25 30  
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro  
35 40 45  
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr  
50 55 60  
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val  
65 70 75 80  
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser  
85 90 95  
Ala Ile Pro Pro Arg  
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<210> 2529  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2529  
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tgtgtctctcc gtgccccccg agtggcctgc tagcccgtc tccacacag tctccttgat  
120  
gtgaagtgtc acccggttg ctgcccgtg tctccgccgt aacacgtgta taccggctca  
180  
gccatggcgg cggctgctgg gaaggctcct gcgtatggct ttgccatccg ggaccggggc  
240  
tttgcctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca  
300  
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360  
ccatgagctc cacaggttcc tgaggga  
387

<210> 2530  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2530  
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu  
1 5 10 15  
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

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                20                25                30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
                35                40                45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Pro Trp Leu Ser Arg
                50                55                60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
65                70                75                80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
                85                90                95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
                100                105                110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
                115                120

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&lt;210&gt; 2531

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2531

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tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaagggtga
60
gctttccaac cagctgaaga tgacaagact aaaccccaag tcgctgcagc tctgtgtcat
120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaaacagac cttcgtcatc
180
agttaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaactcct taggtctcaa ttctttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggctctgc
360
tgcctccacc cacgtgcagg gaaaggaagg acgcgt
396

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&lt;210&gt; 2532

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2532

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Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
1                5                10                15
Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
                20                25                30
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
                35                40                45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
50                55                60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
65                70                75                80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
                85                90                95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2533  
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 gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag  
 120  
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg  
 180  
 gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc  
 240  
 ttcgtcgctt atgaggcagt gctgaggctc gcccggggtc tgctcacata gccgtcccc  
 300  
 acgccagcg gccacccac cagcagctgc tggaggtcgt agtggtgga ggaggcaagg  
 360  
 ggtagtgtgg ctgggttcgg gacccacag ggccattgcc caggagaatg aggagcctcc  
 420  
 ctgcagtgtt gtgggccgag gctgagctc gccctgccca gctactgacc tcaggctcag  
 480  
 gggcccgcca gccat  
 495

<210> 2534  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2534  
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly  
 1 5 10 15  
 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg  
 20 25 30  
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His  
 35 40 45  
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys  
 50 55 60  
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val  
 65 70 75 80  
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr  
 85 90 95

<210> 2535  
 <211> 1904  
 <212> DNA  
 <213> Homo sapiens

<400> 2535  
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 120  
 gtgggtccttg taccctacac ctoggagcat gtgcccagca ggtaccacga gtggatgaaa  
 180  
 tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc  
 240  
 atgcagtgcg gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag  
 300  
 aagtggcagg ccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc  
 360  
 ttccctcacag atctagaaga cccaccttg ggggagatcg aggtcatgat tgcagagccc  
 420  
 agctgcaggg gtaaggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg  
 480  
 accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc  
 540  
 cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg  
 600  
 accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac  
 660  
 gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgctg  
 720  
 ggcagccact ctgtgtgagc aggggtgttg gccatacac ttcaaagacc agagccctgc  
 780  
 actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg  
 840  
 cggggccttg tgtggcctcc ctccagctag tgggtgtggc gagcagactc cagggccagg  
 900  
 gccagtcccc ttctccctc cgggcaaac ccagaccag actctaggaa gctggaatgg  
 960  
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 agctaccacg agccccagcc tcacagtgtc cactcaaggc cagcttggtc ctcttgctct  
 1200  
 gcagaggcag gctgggtgtg ccctgggaac ttgacccggg aacaacaggc ggtccagagt  
 1260  
 gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga  
 1320  
 gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat  
 1380  
 aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg  
 1440  
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 1500  
 ggagcagctg cacctgactg gccacgcggg ggcagtggag gcacaggctc aggggtggccg  
 1560  
 ggctacctg caccctatgg cttacaaagt agagttggcc cagtttcctt ccacctgagg  
 1620  
 ggagcactct gactcctaac agtcttctt gccctgccat catctggggg ggctggctgt  
 1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcatcttcca  
 1740  
 ggtggggaaa cagtcttaga taagtaaggt gacttgcccta aggcctccca gcacccttga  
 1800  
 tcttggagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcttcagtat  
 1860  
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact  
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
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Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20					25					30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35					40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
	50					55				60					
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65				70					75					80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
			100					105					110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
			115				120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
			130				135					140			
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145				150					155					160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165					170					175		
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
			180					185					190		
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
			195				200					205			

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

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 120  
 ccgctgctac tgctggactc ccccgtcatt gcgtgggtggc ccttctccgg ccttgacaac  
 180

ctcgccctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac  
 240  
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac  
 300  
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 360  
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg  
 420  
 ctggcagcct ggctaggatt gcgtctcggc gtcccggtcg agcgggtgac aaccgacgcg  
 480  
 cccggcatct ccgcgatcgt catgtcgac  
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
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Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65					70				75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100				105					110			
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
		115				120					125				
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130				135					140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
				165											

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

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 120  
 cagccgaact acgacctgac gtatgaogac gtcttcatgg caccaaaccg ttcctcggtg  
 180

gggccccga tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc  
 240  
 gtagtggcca atatgaccgc aatttcggga cgtcgcattg cagagaccat cgccaggcgc  
 300  
 ggaggcattg ctgttctgcc ccaagatata cggcgaggatt tegtgcgccg gtccattcgg  
 360  
 cgcgtcaaag atgggcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact  
 420  
 gtcggtgagg ccatgaactt gctcaacaag cgc  
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
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Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
			20					25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55					60				
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65					70				75					80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85						90					95	
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
			100					105					110		
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
			115				120						125		
Asn	Leu	Leu	Asn	Lys	Arg										
			130												

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagtgc tgtttcctca ggtactgcac tgtatacaac tctaaatgca  
 60  
 ccttgcattg aaccatttgc agggcacacg cagtctacat gtatcccagg ttttatgctc  
 120  
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct cccagaggaa  
 180  
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaa  
 240  
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgtact  
 300  
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt  
 360



gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt  
 420  
 gcacagttct cactgttctg cgtgcccage cctcacact ggacgcccac ctcacactct  
 480  
 tctgccaagg gagactttgg ttctcccctt cctgtgtctg gctgtgcggg ccacagtctt  
 540  
 ctgcacgcca gcagcatgac gcgt  
 564

<210> 2542  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2542  
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe  
 1 5 10 15  
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu  
 20 25 30  
 Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser  
 35 40 45  
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe  
 50 55 60  
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala  
 65 70 75 80  
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His  
 85 90 95  
 Ser Pro Leu His Ala Ser Ser Met Thr Arg  
 100 105

<210> 2543  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2543  
 cgcctgaagg gggcggggaa aatggaatgg gggggaaggg cgcgggtggg gacatgctgg  
 60  
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta  
 120  
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg  
 180  
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc  
 240  
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag  
 300  
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc  
 360  
 aatggggccc agcaggcagc agtgctg  
 387

<210> 2544  
 <211> 122  
 <212> PRT

<213> Homo sapiens

<400> 2544

```

Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

```

gcgattatatt tcgtgctgcc cggacttatac atggtcggct ggtggtcagg tttcccgta
60
tggaccaccc tcgtatctg tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg cctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggg gccgccgagg ctaacaagg gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgctcga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65              70              75              80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
              85              90              95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
              100              105              110

```

<210> 2547  
 <211> 556  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcacaa gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcactttctc ttactttttt aaagacaggg cacttgcctt
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacaa aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggctgggcc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctccctggta taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

```

<210> 2548  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1           5           10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
          20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
          35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
          50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
          85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
          100          105

```

<210> 2549  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2549  
 nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt  
 60  
 atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt  
 120  
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc  
 180  
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta  
 240  
 acagtagaaa cacgtcgcgc aggtgcgcacg gaaaatgaag cggttcgcgtg ggtatctgat  
 300  
 ggttctgggtg aatttactat tgagacgacg gataaagcga ctcgtgggtac acgcattact  
 360  
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta  
 420  
 acaaaatatt ctgat  
 435

<210> 2550  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2550  
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala  
 1 5 10 15  
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu  
 20 25 30  
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe  
 35 40 45  
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly  
 50 55 60  
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val  
 65 70 75 80  
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg  
 85 90 95  
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys  
 100 105 110  
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys  
 115 120 125  
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser  
 130 135 140  
 Asp  
 145

<210> 2551  
 <211> 403  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga  
 60  
 ggactccact tctggggacg cctgggttcgt tcgcccacca ggcttaggct acgtccatg  
 120  
 ctccccagc aatctctgtc tacacctctc gcggcgccct gccctctctc gacccctttc  
 180  
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggagggt  
 240  
 ccagcctccc cgcgagggtac cagccccaca gtcttctggg agccattgtg gccagggacg  
 300  
 gcctctggac tgccaggctg gggtggggac caggaacat cggctctactc aggtgtgagg  
 360  
 gggcagggtct ggctgcccc aaagttggct ccctcctgga can  
 403

&lt;210&gt; 2552

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2552

Xaa	Pro	Ala	Ser	Leu	Thr	Ser	Val	Ser	Pro	Pro	Arg	Gly	Arg	Leu	Ser
1				5					10					15	
Thr	Leu	Asn	Arg	Gly	Leu	His	Phe	Trp	Gly	Arg	Leu	Val	Arg	Ser	Pro
			20					25					30		
Thr	Arg	Pro	Arg	Leu	Arg	Ser	Met	Leu	Pro	Gln	Gln	Ser	Leu	Ser	Thr
		35					40					45			
Pro	Pro	Ala	Ala	Pro	Cys	Pro	Pro	Pro	Thr	Pro	Phe	Gln	Pro	Xaa	Ser
		50				55					60				
Pro	Pro	Thr	Pro	Ser	Glu	Lys	Gln	Pro	Gln	Ile	Pro	Glu	Val	Glu	Ala
65					70				75					80	
Pro	Ala	Ser	Pro	Arg	Gly	Thr	Ser	Pro	Thr	Val	Phe	Trp	Glu	Pro	Leu
			85						90					95	
Trp	Pro	Gly	Thr	Ala	Ser	Gly	Leu	Pro	Gly	Trp	Val	Gly	Asp	Gln	Gly
		100						105				110			
Thr	Ser	Val	Tyr	Ser	Gly	Val	Arg	Gly	Gln	Val	Trp	Pro	Ala	Pro	Lys
		115					120					125			
Leu	Ala	Pro	Ser	Trp	Thr										
		130													

&lt;210&gt; 2553

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg  
 60  
 gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag  
 120  
 gcatcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt  
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg  
 240  
 gaccctcctg gccctgtcc tggtccacc ctcagctgct ggcaggtggg tcaccaggcc  
 300  
 tctgccccaa gaaactcctg caggcagctc tggaccccct gtcttacaca ccttctcact  
 360  
 gagcctgcca gcatcccagn  
 380

<210> 2554  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2554  
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly  
 1 5 10 15  
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr  
 20 25 30  
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys  
 35 40 45  
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly  
 50 55 60  
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln  
 65 70 75 80  
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp  
 85 90 95  
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro  
 100 105 110

<210> 2555  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2555  
 ntccggatgg aaaagtaaag accagcaata gccataaacg ccattaacac ataccatata  
 60  
 atgttggttaa tgctgcccg tagttcgggtg gcattcttca tgggcaatag tttaatggga  
 120  
 gataacgcga ataatggtag tgcgttcta gtgctcacag acctgggtcac ccaaatagaa  
 180  
 ggatttatat cctcccatat cctcattttt gtgctcgttg gcctcggcat tgtctttacc  
 240  
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat  
 300  
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctcgat  
 360  
 cacgcggn  
 368

<210> 2556  
 <211> 102  
 <212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1           5           10           15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
 20           25           30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
 35           40           45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
 50           55           60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
 65           70           75           80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
           85           90           95
Val Gly Leu Asp His Ala
           100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtagaccg
60
attgatgaga tgggccccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa ggggtggcaag atcgggtctct tcggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1           5           10           15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
 20           25           30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
 35           40           45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
 50           55           60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

<210> 2559  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2559
tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2560
Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1      5      10      15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
20     25     30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
35     40     45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
50     55     60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65     70     75     80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
85     90     95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
100    105    110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
115    120    125
Lys

```



<210> 2561  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2561  
 nnactcacca ctgtggttct actatgcctt ctgaccccggt cttggacttc aactgggaga  
 60  
 atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga  
 120  
 aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac  
 180  
 tcaaagacta aggtgggttat gaaggggtcaa aatgtatcta tgttttgttc ccataagaac  
 240  
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aacctcaggat  
 300  
 ggaaaagggtg aacctgcgat ttttaacctt agcatcacag aagcccatga atcaggcccc  
 360  
 taaaaatgca aagcccaagt taccagctgt taaaaatata gtcgtgactt cagcttcacg  
 420  
 attgtcgac  
 429

<210> 2562  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2562  
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr  
 1 5 10 15  
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser  
 20 25 30  
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala  
 35 40 45  
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys  
 50 55 60  
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn  
 65 70 75 80  
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu  
 85 90 95  
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile  
 100 105 110  
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr  
 115 120 125  
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp  
 130 135 140

<210> 2563  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

<400> 2563  
 ggatcccaga cgagtgcctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc  
 60  
 accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt  
 120  
 aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacia agaattcttt  
 180  
 gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggt ggacctgggt  
 240  
 cactacacia ggcagggcct ccagcgg  
 267

<210> 2564  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 2564  
 Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr  
 1 5 10 15  
 Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr  
 20 25 30  
 Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln  
 35 40 45  
 Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser  
 50 55 60  
 Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val  
 65 70 75 80  
 His Tyr Thr Arg Gln Gly Leu Gln Arg  
 85

<210> 2565  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 2565  
 cttcgactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg  
 60  
 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat  
 120  
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc  
 180  
 gacatcgccc agttgcagca actcgggtgtc tccgatgtgg tcgatctgog ttccacctat  
 240  
 gaggtggcca gcgagggccc ggggccgctg accgggcgtg gggtgaccat ccacccccat  
 300  
 tccttcctgc ccgaccagca cgccaatgtg cac  
 333

<210> 2566  
 <211> 111  
 <212> PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1           5           10           15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
      20           25           30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
      35           40           45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
      50           55           60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65           70           75           80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
      85           90           95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
      100           105           110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

```

ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
60
agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcggggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
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<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

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Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
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Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
      20           25           30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
      35           40           45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
      50           55           60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

65                                      70                                      75                                      80  
 Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu  
    85                                      90                                      95  
 Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn  
    100                                      105                                      110  
 Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp  
    115                                      120                                      125  
 Thr Asp Thr Arg  
    130

<210> 2569  
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 <212> DNA  
 <213> Homo sapiens

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 tgggagtccc aagcgggagg gtcgttcact gttactcgtg acacgtcagg ggagcagctt  
 180  
 ggcaggggca ctaagatcac actgttcctc aaggacgatc agctggagta ccttgaggag  
 240  
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<210> 2570  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 2570  
 Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly  
   1   5   10   15  
 Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys  
    20   25   30  
 His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser  
    35   40   45  
 Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr  
    50   55   60  
 Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu  
 65   70   75   80  
 Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr  
    85   90   95  
 Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile  
    100   105   110

<210> 2571  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2571

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 180  
 gaagatgggt ctctctactt cgaaaccacc attacatttg aagacggcag cactgttacc  
 240  
 ggtgacgcat tcctagtgtg taccggacgt acccctaaca ccgaccgcct tggcctcgac  
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 335

&lt;210&gt; 2572

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
1			5					10						15	
Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
			20				25						30		
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
		35				40				45					
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
	50				55					60					
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65					70				75					80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
			85					90					95		
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
			100					105					110		

&lt;210&gt; 2573

&lt;211&gt; 460

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2573

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 120  
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 240  
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 300  
 cgatcccacc agaacggagg agatgaagggt gagggcattg tgtgagggga ggatcgcggc  
 360

cactgaccac gccagtaccg gcaggggtcag gatcagccccg acgagaccgg aagtgatgcg  
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<210> 2574  
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 <212> PRT  
 <213> Homo sapiens

<400> 2574  
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 20 25 30  
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 35 40 45  
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn  
 50 55 60  
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly  
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 85 90 95  
 Gly Gly Asp Glu Gly Glu Gly Ile Val  
 100 105

<210> 2575  
 <211> 3954  
 <212> DNA  
 <213> Homo sapiens

<400> 2575  
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 180  
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3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
		50				55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85				90						95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105						110	
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp	
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
		130				135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165					170					175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
			180					185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195				200						205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
		210				215					220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235					240
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
			245					250						255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260					265					270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
		275				280						285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
		290				295					300				
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315					320
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
			325					330						335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
		340						345					350		
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

355	360	365
Leu Asp Val Val Ala Gly Ser	Val Thr Val Leu Ser Gly Arg Arg Gly	
370	375	380
Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr		
385	390	395
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser		
405	410	415
Thr Leu Gly Pro Ser Glu Glu Gln Glu Ser Trp Pro Gly Ala Pro		
420	425	430
Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln		
435	440	445
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu		
450	455	460
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln		
465	470	475
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile		
485	490	495
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg		
500	505	510
Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg		
515	520	525
Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp		
530	535	540
Arg Val Asp Ala Gln Asp Glu Thr Ala Ala Glu Phe Thr Leu Arg Leu		
545	550	555
Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala		
565	570	575
His Gly Asp Glu Gly Cys Gly Ala Cys Gly Gly Val Gln Glu Glu Leu		
580	585	590
Gly Arg Leu Arg Asp Gly Val Glu Arg Cys Ser Cys Pro Leu Leu Pro		
595	600	605
Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly		
610	615	620
Pro Leu Asp Gly Phe Ser Val Phe Gly Gly Ser Ser Gly Ser Ala Leu		
625	630	635
Gln Ala Leu Gln Gly Glu Leu Ser Glu Val Ile Leu Ser Phe Ser Ser		
645	650	655
Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr Thr Val Glu Gly Gln Gly		
660	665	670
Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys Asp Arg Ile Ile Ser Glu		
675	680	685
Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu		
690	695	700
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys		
705	710	715
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg		
725	730	735
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser		
740	745	750
Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr		
755	760	765
Ser Gln Met Gln Ala Ala Leu Glu Lys Leu Val Gly Gly Gln Ala		
770	775	780
Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn Ser Ser Leu Gln Leu Leu		

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785              790              795              800
Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala
              805              810              815
Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly
              820              825              830
Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro
              835              840              845
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro
              850              855              860
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
865              870              875              880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
              885              890              895
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala
              900              905              910
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
              915              920              925
Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp
              930              935              940
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu
945              950              955              960
Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro
              965              970              975
Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu
              980              985              990
Ala His Ser Glu Glu Pro Leu Thr Ile Phe Ser Gly Ala Leu Leu Tyr
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Gly Asp Pro Glu Leu Glu His Ala
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<210> 2577  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

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<400> 2577
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343

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<210> 2578  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2578

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Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
      20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
      35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
      50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
      85           90           95
Ser Asn Arg Pro
      100

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&lt;210&gt; 2579

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2579

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180
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420

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&lt;210&gt; 2580

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2580

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      35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
      50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

```

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Gln Thr Thr Val Pro Asp Thr Gln Gln Phe Val Tyr Gln Ala His Ser
          35          40          45
Leu Asp Lys Ile Glu Ile Ile Gly Arg Ile Leu Gln Ala Asn Asp Val
          50          55          60
Glu Lys Val Ile Ile Phe Cys Arg Thr Lys Arg Ala Cys Gln Arg Leu
65          70          75          80
Ser Asp Asp Leu Asp Asp Arg Gly Phe Lys Thr Arg Ala Ile His Gly
          85          90          95
Asp Leu Thr Gln Val Ala Arg Glu Lys Ala Leu Lys Lys Phe Arg His
          100          105          110
Gly Glu Ala Thr Ile Leu Val Ala Thr Asp Val Ala Ala Arg Gly Ile
          115          120          125
Asp Val Thr Gly Val Ser His Val Ile Asn His Glu Cys Pro Glu Asp

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 145                                      150

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<210> 2584

<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

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His	Arg	Ser	Val	Tyr	Gly	Cys	Pro	Leu	Ala	Lys	Lys	Arg	Lys	Thr	Gln
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Asp	Lys	Gln	Pro	Gln	Glu	Pro	Ala	Pro	Lys	Arg	Lys	Pro	Phe	Ala	Val
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Lys	Ala	Asp	Ser	Ser	Ser	Val	Asp	Glu	Cys	Asp	Asp	Ser	Asp	Gly	Thr
			85						90					95	
Glu	Asp	Met	Asp	Glu	Lys	Glu	Glu	Asp	Glu	Gly	Glu	Glu	Tyr	Ser	Glu
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Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp

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  145      150      155      160
Glu Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His
      165      170      175
Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp
      180      185      190
Glu Tyr Asp Asn Tyr Asp Glu Leu Val Ala Lys Ser Leu Leu Asn Leu
      195      200      205
Gly Lys Ile Ala Glu Asp Ala Ala Tyr Arg Ala Arg Thr Glu Ser Glu
      210      215      220
Met Asn Ser Asn Thr Ser Asn Ser Leu Glu Asp Asp Ser Asp Lys Asn
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Glu Asn Leu Gly Arg Lys Ser Glu Leu Ser Leu Asp Leu Asp Ser Asp
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Val Val Arg Glu Thr Val Asp Ser Leu Lys Leu Leu Ala Gln Gly His
      260      265      270
Gly Val Val Leu Ser Glu Asn Met Asn Asp Arg Asn Tyr Ala Asp Ser
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Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser
      450      455      460
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro
  465      470      475      480
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro
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Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp
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      515      520      525
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His
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Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His

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Asp	Val	Ser	Lys	Ser	Ser	Gln	Ala	Ser	Asp	Arg	Val	Leu	Arg	Pro Met
				595				600					605	
Cys	Phe	Val	Lys	Gln	Leu	Glu	Ile	Pro	Gln	Tyr	Gly	Tyr	Arg	Asn Asn
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Val	Pro	Thr	Thr	Thr	Pro	Arg	Ser	Asn	Leu	Ala	Lys	Glu	Leu	Glu Lys
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Tyr	Ser	Lys	Thr	Ser	Phe	Glu	Tyr	Asn	Ser	Tyr	Asp	Asn	His	Thr Tyr
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Cys	Gly	Gly	Gly	Ser	Ser	Ala	Ser	Ser	Thr	Cys	Ser	Lys	Ser	Ser Phe
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Asp	Tyr	Thr	His	Asp	Met	Glu	Ala	Ala	His	Met	Ala	Ala	Thr	Ala Ile
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Glu	Asn	Gly	Thr	Leu	Asp	Leu	Ser	Met	Asn	Lys	Gln	Arg	Pro	Arg Asp
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Gln	Ala	Val	Met	Asn	Asn	Arg	Cys	Phe	Gln	Leu	Gly	Glu	Gly	Asp Cys
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Trp	Asp	Leu	Pro	Val	Asp	Tyr	Thr	Lys	Met	Lys	Pro	Arg	Arg	Ile Asp
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Glu	Asp	Glu	Ser	Lys	Asp	Ile	Thr	Pro	Glu	Asp	Leu	Asp	Pro	Phe Gln
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Glu	Ala	Leu	Glu	Glu	Arg	Arg	Tyr	Pro	Gly	Glu	Val	Thr	Ile	Pro Ser
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Pro	Lys	Pro	Lys	Tyr	Pro	Gln	Cys	Lys	Glu	Ser	Lys	Lys	Asp	Leu Ile
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Thr	Leu	Ser	Gly	Cys	Pro	Leu	Ala	Asp	Lys	Ser	Ile	Arg	Ser	Met Leu
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			900					905					910	
Ser	Gly	His	Ile	Thr	Gly	Asn	Tyr	Ala	Ser	His	Arg	Ser	Leu	Ser Gly
	915					920						925		
Cys	Pro	Arg	Ala	Lys	Lys	Ser	Gly	Ile	Arg	Ile	Ala	Gln	Ser	Lys Glu
	930					935					940			
Asp	Lys	Glu	Asp	Gln	Glu	Pro	Ile	Arg	Cys	Pro	Val	Pro	Gly	Cys Asp
	945				950					955				960
Gly	Gln	Gly	His	Ile	Thr	Gly	Lys	Tyr	Ala	Ser	His	Arg	Ser	Ala Ser
				965				970						975
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	Gly	Tyr	Leu	Asn Gly

980 985 990  
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro  
 995 1000 1005  
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr  
 1010 1015 1020  
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys  
 1025 1030 1035 1040  
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser  
 1045 1050 1055  
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile  
 1060 1065 1070  
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys  
 1075 1080 1085  
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu  
 1090 1095 1100  
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu  
 1105 1110 1115 1120  
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln  
 1125 1130 1135  
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val  
 1140 1145 1150  
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro  
 1155 1160 1165  
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile  
 1170 1175 1180  
 Gln Val  
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

cactcactcc tccacagaat ttggcctcag ccagccccac gctcagcatg cccagccctg  
 60  
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc  
 120  
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgcctttc  
 180  
 gggcctctag cctcacaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat  
 240  
 taagtcatgt catcctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc  
 300  
 atccccggga ggagtgggtg ggatgccgcc tgaccctggg ccacctggct gcagcatctg  
 360  
 tgttgatgac caccctcctg cctcaggctt tgctcctgaa tgtttctgct ctctaggtct  
 420  
 gtccgctcct ggccctgctc ttcttaactc cgttcaagcc cctgggtca cacgtccatg  
 480  
 ctcatcactt caatgacgcg gatgctggcg atccccaaat ctctaatacc aagtgcagat  
 540  
 ct  
 542

<210> 2586  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 2586  
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro  
 1 5 10 15  
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser  
 20 25 30  
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser  
 35 40 45  
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly  
 50 55 60  
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val  
 65 70 75 80  
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr  
 85 90 95  
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro  
 100 105 110  
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu  
 115 120

<210> 2587  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2587  
 ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag  
 60  
 gcccagggcg ctggagaccg catggatgag gtcatgaagg aggtgccgcg cgttcgtaag  
 120  
 gatgccggct acccgccgct ggtcaccocg tegtcccaga tegtgggaac ccaggcggtg  
 180  
 ttcaacgtct tgatgggcaa tggttcgtag aagaatctca ctgccgagtt tgccgacctc  
 240  
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc  
 300  
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag  
 360  
 tgggatcagt tggtcgagca ggccaagagt cttgagggct tcgacggctc cgacgaggac  
 420  
 gttcttacca acgcg  
 435

<210> 2588  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2588  
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

```

      1             5             10             15
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met
      20             25             30
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
      35             40             45
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
      50             55             60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
      65             70             75             80
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
      85             90             95
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
      100            105            110
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
      115            120            125
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
      130            135            140
Ala
145

```

&lt;210&gt; 2589

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2589

```

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc
60
ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgtcga tttcgcgac
120
gaggtcgctc gcatcgtcga ggtcatggag caggcctact gggcgggcgc acgcggcggc
180
acgategtct acgtcggggc gctgggcacg gacgccaagc tggctctgcc ggccaacgac
240
ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattggggcg agtgcgacc
300
gactatgcca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgatc
360
acgcgt
366

```

&lt;210&gt; 2590

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2590

```

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
      1             5             10             15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20             25             30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35             40             45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100              105              110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115              120

```

&lt;210&gt; 2591

&lt;211&gt; 341

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2591

```

acgcgtaaag gcacgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tctgtctcca gggcaggccc tgggcagggc aatgctgggg acacggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag ggttgagggtt acatgaggga
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

```

&lt;210&gt; 2592

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2592

```

Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1              5              10              15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20              25              30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35              40              45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50              55              60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65              70              75              80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85              90              95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100              105

```

&lt;210&gt; 2593

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



<400> 2593  
 cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg  
 60  
 gcgcctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat ttcggtacc  
 120  
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc  
 180  
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg  
 240  
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa  
 300  
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg  
 360  
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat  
 420  
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca  
 480  
 gctgagatgt ctcttaagct t  
 501

<210> 2594  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<400> 2594  
 Arg Val Arg Pro Pro Glu Asp Phe Tyr Ala Gln Ile Pro Leu Leu Arg  
 1 5 10 15  
 Glu Leu Ile Ser Ala Leu Ser Trp Gly Phe Met Glu Val Asp Glu Tyr  
 20 25 30  
 Glu Ala Asp Asp Ile Ile Gly Thr Leu Ala Arg Gln Ala Asp Glu Ala  
 35 40 45  
 Gly Asp Tyr Met Thr Tyr Ile Val Ser Ser Asp Leu Asp Met Leu Gln  
 50 55 60  
 Ile Val Asp Glu Asn Thr Lys Met Tyr Arg Ile Leu Arg Gly Phe Ser  
 65 70 75 80  
 Asp Leu Glu Glu Met Asp Thr Pro Ala Ile Glu Glu Lys Tyr Gly Ile  
 85 90 95  
 Leu Lys Ser Gln Phe Leu Asp Leu Lys Ala Leu Lys Gly Asp Asn Ser  
 100 105 110  
 Asp Asn Ile Pro Gly Val Pro Gly Ile Gly Glu Lys Thr Ala Val Lys  
 115 120 125  
 Leu Leu Asn Glu Tyr Gly Ser Leu Glu Gly Ile Tyr Asn His Ile Lys  
 130 135 140  
 Glu Ile Ser Gly Ala Thr Gln Lys Lys Leu Ile Ala Gly Arg Glu Ser  
 145 150 155 160  
 Ala Glu Met Ser Leu Lys Leu  
 165

<210> 2595  
 <211> 928  
 <212> DNA  
 <213> Homo sapiens

<400> 2595  
 agatcttcca gatgaacaa tgatcaatta agacacgcgg cgacatgggtg gccctgcct  
 60  
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg  
 120  
 gtcacaattt ctggggctca ctcatataac accaacaaat gggatatttg tgaagaactt  
 180  
 cgcttgccgg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg  
 240  
 tggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg  
 300  
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa  
 360  
 tcggatccac tgaacacaga acagagtttg ccacttcaga aggaggcatt agaagcta  
 420  
 gttaccacagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa  
 480  
 tttcaattga gttcacaat gcatgagtct atcagagagt atttggtaaa aagacaattt  
 540  
 tctacaaagg aggacacaaa taataaggaa caagggtgtg ttattgattc tctaaaatta  
 600  
 agtgaggaga tgaagcccaa tctagatggg gttgatttat tcaacaatgg tggttctgga  
 660  
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa  
 720  
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag  
 780  
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct  
 840  
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt  
 900  
 gacattcttc ttggtcaaca taatgatg  
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596  
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp  
 1 5 10 15  
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His  
 20 25 30  
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser  
 35 40 45  
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu  
 50 55 60  
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg  
 65 70 75 80  
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val  
 85 90 95  
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

```

      100      105      110
Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
      115      120      125
Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
      130      135      140
Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
145      150      155      160
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
      165      170      175
Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
      180      185      190
Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
      195      200      205
Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
      210      215      220
Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
225      230      235      240
Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
      245      250      255
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
      260      265      270
Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
      275      280      285
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
      290      295      300
Gly Gln His Asn Asp
305

```

&lt;210&gt; 2597

&lt;211&gt; 631

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2597

```

ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gtttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc tttaacaagt tttgggcaag agtggtatgg ctgacctggt
240
gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctagggtg ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaag
420
gccgagtttc ataggagagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtgagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccaggggtt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccaggggtgga agcgggtggt
600

```

tcactccacg agtgctattt cacttacgcg t  
631

<210> 2598  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2598  
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg  
1 5 10 15  
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn  
20 25 30  
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser  
35 40 45  
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp  
50 55 60  
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg  
65 70 75 80  
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg  
85 90 95  
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg  
100 105

<210> 2599  
<211> 356  
<212> DNA  
<213> Homo sapiens

<400> 2599  
nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg  
60  
tgtcatTTTTG atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg  
120  
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc  
180  
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca  
240  
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gcctgacat tgaagacttt  
300  
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn  
356

<210> 2600  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2600  
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val  
1 5 10 15  
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu  
20 25 30  
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

          35              40              45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
   50              55              60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65              70              75              80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
          85              90              95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100              105              110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

```

gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
60
tactttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcaagggc
180
ttgatcgctt tgcccgaaga cctcggtatc cgccgcaccg acgccaccg cgaactgttg
240
gccccaaga gcgtggccga cctggtggag tggtcgggtg gcttgtgcaa cccgcccgcc
300
aagttcagga gctggtaaata gcgcgcct
329

```

<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

```

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1              5              10              15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20              25              30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35              40              45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50              55              60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65              70              75              80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
          85              90              95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100              105

```

<210> 2603

<211> 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2603

```

tcatgatcca ttgctctacc ctttacggtt gtgcacctac gccaggtcg gtggtcagga
60
gcacgggttc ggtgggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
120
ggttgtggta agtgggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
180
agctctgggtt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
240
tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc
300
gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac
360
cggagctggt ggtcacctgg gtggaatcca ggtcatccgg aaccggggtc aggttgctcg
420
cgg
423

```

&lt;210&gt; 2604

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2604

```

Met Glu Ile Ile Phe Thr Ala Lys Glu Ile Lys Arg Ile Ile Asp Ala
1      5      10      15
Cys Lys Ile Leu Tyr Asp Asn Glu Gly Tyr Ala Ile Ile Ser Glu Ile
20     25     30
Gly Leu Val Ser Gly Val Asp Arg Val Val Ser Ala Thr Ala Gln Gly
35     40     45
Asn Gln Ser Phe Asp Phe Thr Glu Val Ile Ser Ala Gln Ile Val Ala
50     55     60
His Leu Thr Thr Tyr His Asn Leu Pro Ser Ala Asn Asn Gly Val Lys
65     70     75     80
Glu Val Leu Asp Leu Gly Thr Thr Glu Pro Met Leu Leu Thr Thr Asp
85     90     95
Leu Gly Val Gly Ala Gln Pro
100

```

&lt;210&gt; 2605

&lt;211&gt; 354

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2605

```

ngggagggag ggcattgtcaa aagcgactgt atccagaggg tttgatttaa acatttttca
60
aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc
120
tttgcattgt gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggaa
180

```

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc  
 240  
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat  
 300  
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagg  
 354

<210> 2606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2606

Met	Ser	Lys	Ala	Thr	Val	Ser	Arg	Gly	Phe	Asp	Leu	Asn	Ile	Phe	Gln
1				5					10					15	
Asn	Ile	Cys	Gly	Lys	Gln	Arg	Gly	Glu	Gly	Ile	Ser	Pro	Thr	Phe	Phe
			20					25					30		
Ser	Thr	Ser	Ser	Leu	His	Ala	Gly	Thr	Cys	Ser	Thr	Phe	Lys	Met	Cys
			35				40					45			
His	Phe	Gly	Arg	Lys	Gly	Arg	Asn	Asn	Tyr	Leu	Lys	Gly	Ile	His	Val
	50				55						60				
Ser	Met	Ser	Pro	Phe	Ser	Ser	Ala	Glu	Gly	Cys	Pro	Lys	Val	Pro	Pro
65					70					75				80	
Leu	Arg	Arg	Glu	Lys	Gly	Glu	Arg	Arg	Arg	Asp	Ser	Phe	His	Gln	Met
			85					90						95	
Gly	His	Pro	Gly	Leu											
			100												

<210> 2607

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2607

tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg  
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 120  
 atgacatgga cagaaccccg tcggaaaaaa gccggaatgt gcaaacccaa attcccacca  
 180  
 cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa  
 240  
 actttttttt ttttaaanmn anacccccaa aaaaaccaaa aaaaaaatt taaaaaa  
 297

<210> 2608

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2608

Met	Ile	Arg	Tyr	Pro	Asn	Gln	Gln	Arg	Lys	Gln	Arg	Lys	Leu	Leu	Leu
1				5					10				15		
Phe	Leu	Cys	Cys	Phe	Phe	Phe	Leu	Arg	Thr	Asp	Leu	Ala	Pro	Ala	Pro

			20					25					30				
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly		
		35						40				45					
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile		
	50					55					60						
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe		
65					70					75					80		
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys			
				85				90						95			

&lt;210&gt; 2609

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2609

ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg  
 60  
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 120  
 caattgecta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctcgcatctg  
 180  
 tgaaagtctt acctcggggg cgtcatctcg gctgtcatcg tcggcaaata actcagctgg  
 240  
 ccgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga  
 300  
 ccacc  
 305

&lt;210&gt; 2610

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2610

Met	Met	Ser	Gly	Lys	Asp	Asp	Pro	Gly	Met	Ala	Lys	Val	Tyr	Gly	Phe		
1				5				10						15			
Val	Asp	Thr	Ser	Leu	Thr	Ile	Pro	Ile	Arg	Ser	Ser	Gly	Asp	Pro	Cys		
			20				25					30					
Val	Pro	Trp	Thr	Pro	Ile	Ala	Tyr	Glu	Lys	Ile	Phe	Phe	Phe	Pro	Pro		
		35				40					45						
Lys	Lys	His	Pro	Pro	Leu	Ala	Ser	Val	Lys	Val	Leu	Pro	Arg	Gly	Arg		
	50				55					60							
His	Leu	Gly	Cys	His	Arg	Arg	Gln	Ile	Thr	Gln	Leu	Ala	Val	Pro	Phe		
65				70				75						80			
Val	Ile	Ala	Arg	Ala	Thr	Asp	Leu	Asp	Gly	Xaa	Ala	Cys	Thr	Ala	Thr		
				85				90						95			

Thr Thr

&lt;210&gt; 2611

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



<400> 2611  
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 60  
 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcaccctg  
 120  
 acgcccagcg ccaccgctgt cggagctcag gtgcgccgcg tcgaggtggc aacagccaac  
 180  
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac  
 240  
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg  
 300  
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg  
 342

<210> 2612  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 2612  
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 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro  
 20 25 30  
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly  
 35 40 45  
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr  
 50 55 60  
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr  
 65 70 75 80  
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly  
 85 90 95  
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr  
 100 105 110  
 Asp Ala

<210> 2613  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<400> 2613  
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 ttctctcctt ccaaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga  
 120  
 tatgcccta ctgggaaggg ccaagtgggc aggcagagtc tggggtggag cgaggtgggg  
 180  
 ctgggaagca ctctgtcttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc  
 240  
 ctctctctgg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct  
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact  
 360  
 ctggggccccc tcccaggctc tcctcgtggc aggcagggac ttggggccagc atgg  
 414

<210> 2614

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2614

Met	Val	Leu	Cys	Leu	Met	Phe	Ser	Arg	Tyr	Ala	Pro	Thr	Gly	Lys	Gly
1				5					10					15	
Gln	Val	Gly	Arg	Gln	Ser	Leu	Gly	Trp	Ser	Glu	Val	Gly	Leu	Gly	Ser
			20					25					30		
Thr	Pro	Ala	Phe	Leu	Leu	Pro	Gln	Asn	Glu	Cys	Lys	Phe	Trp	Gln	Leu
		35					40					45			
Leu	Leu	Leu	Leu	Gly	Gly	Gly	Lys	Glu	Gly	Ser	Pro	Pro	Gly	Leu	Arg
	50					55					60				
Leu	Arg	Glu	Trp	Ala	Gly	Asp	Pro	Leu	Asp	Gly	Gln	Gln	Arg	Leu	Ala
65					70					75				80	
Ser	Val	Arg	Arg	Leu	Pro	Cys	Val	Thr	Leu	Gly	Pro	Leu	Pro	Gly	Ser
			85					90						95	
Pro	Arg	Gly	Arg	Gln	Gly	Leu	Gly	Pro	Ala	Trp					
			100					105							

<210> 2615

<211> 394

<212> DNA

<213> Homo sapiens

<400> 2615

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 120  
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgtacg tgtgcgaaga cgatttcgac  
 180  
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag  
 240  
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc  
 300  
 attccgaacc aggtgccgta cgtgggtgctg aaaggcgcca tcaaccagct gaccaaggct  
 360  
 atggccttga acctggcgcc gcacgggtgct cgct  
 394

<210> 2616

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2616

Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

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Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20             25             30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35             40             45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50             55             60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Arg Glu
      65             70             75             80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85             90             95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100            105            110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115            120            125
Gly Ala Arg
      130

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<210> 2617

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2617

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120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttggccc caacggttct gggaagacca ccttggtacg cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tcgcatect gtatcgcgcg tcgtattgag atcgtctggc agagcgcgac cgctccctct
360
gacctcaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
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513

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<210> 2618

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2618

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Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
      1             5             10             15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20             25             30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
      50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
65      70      75      80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100             105             110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115             120             125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130             135             140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
145      150      155      160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165              170

```

&lt;210&gt; 2619

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2619

```

nnaaatttcg acgacctga ggttttcctc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ctttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggt ttacgagcgg
240
gcgggcggtc acccttacgg ctcggtgtac cccggggccga ttggtgcggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

&lt;210&gt; 2620

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2620

```

Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
1      5      10      15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20      25      30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35      40      45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
50      55      60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
65      70      75      80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
	100						105						110		
Leu	Pro	Tyr	Ala												
	115														

<210> 2621  
 <211> 1485  
 <212> DNA  
 <213> Homo sapiens

<400> 2621  
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 60  
 ttacttttaa aaattacttg ttccccaaa ttgttgagtg ccgccgtttg gtttcctatg  
 120  
 ttttctttcc ctgttttgat ttgtctgaag ggagaggtgg tgggtggttag gatcagagct  
 180  
 ctccctggcat ccgtggggag gatttgctgg tgggtggcttc gggctcatgc ccagacacac  
 240  
 tcaactgcccc gtctgtccaa ggccctccct tcccccttgc tgggtgggagg agctcgtgtg  
 300  
 ctccctggcc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg  
 360  
 aagggctagg agggaagccg gccccgctc tgcagaagct gcatttcagc tgaatctgtg  
 420  
 tttcagcctc agttggttgc accgttagcc cctctcctcc cggatggtea tgtttttgtc  
 480  
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 720  
 gaagccaacc accttgagga ttttttttct tgaatttcgc tgttttcttc tgcttccttt  
 780  
 agataaaaag cagctcaaga gacctatct tagggatgag aaaaacatgc atattaattc  
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 catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgtaggaat  
 900  
 tgggtcaaat tcatctcttt cttaagccc atcaactccc aggaacgggtt gagtactca  
 960  
 gttacctaag cttgctattc atccaaatca ttttctagag tcaactgtata aggtctatg  
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 1080  
 ttctgtacaa ccgtgtgtta tcacagtgc gttttaagt taacngttga acttaggcac  
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 1200  
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 1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt  
 1320  
 aaatacacag acgggcgagt ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct  
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<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
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Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20				25					30			
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
		35				40						45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55					60				
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70					75				80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

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 gcgacggcgg ctgcggcggc ggcgggaccc ccaggcctcc tccggggtat gaaaatcggc  
 120  
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcggc  
 180  
 ggtggtagtg gcggcggcgg cggcggcggc agcagcggca ggagggcaga gatggaaccc  
 240  
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 300  
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 360  
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 420  
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 480  
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 540  
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga  
 600

ggcgggtgaag ggggggagtca cggcgtcatc caggacctca gtattctcca ccagcatgtc  
660  
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720  
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960  
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1140  
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2220

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 2940  
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 3000  
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 3060  
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 ctacaaaaaa aactttgttg ctaggattaa gggtattcta attgctttac tctcaggaaa  
 3180  
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 3240  
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 3360  
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 3420  
 taaatgtact ctgaacttcc aaaccacatt cattccagcc tggtagaaca aatattcttg  
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 3524

&lt;210&gt; 2624

&lt;211&gt; 895

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2624

Met Lys Ile Gly Ser Gly Phe Leu Ser Gly Gly Gly Gly Thr Gly Ser  
 1 5 10 15  
 Ser Gly Gly Ser Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Gly



				20				25				30				
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Val	Ser	Asp	Phe	Ser	Gly	Tyr	Thr	Asn	Met	Met	Ser	Asp	Val	Ser	Glu
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Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys  
50 55 60  
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65 70 75 80  
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      35             40             45
Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
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Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
65             70             75             80
Phe Leu Cys Ile Pro Pro Pro Leu His Ala
      85             90

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&lt;211&gt; 650

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2629

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&lt;210&gt; 2630

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

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50

55

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&lt;211&gt; 5124

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2631

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Glu	Ala	Leu	Asn	Ala	Arg	Pro	Trp	Trp	Ile	Arg	Met	Gly	Thr	Asp	Ile
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Cys	Tyr	Tyr	Lys	Asn	His	Phe	Ser	Arg	Ser	Ser	Val	Ala	Ala	Gly	Gly
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His	Lys	Asp	Asp	Val	Cys	Tyr	Phe	Ala	Tyr	His	Tyr	Pro	Tyr	Thr	Tyr
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Ala	Glu	Ser	Asn	Asp	Glu	Leu	Asp	Ile	Glu	Leu	Ala	Glu	Asn	Val
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Asp	Tyr	Glu	Pro	Ser	Ala	Gln	Glu	Glu	Val	Leu	Ser	Asp	Ser	Glu
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&lt;210&gt; 2633

&lt;211&gt; 1569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2633

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&lt;210&gt; 2634

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2634

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          20           25           30
Ser Phe Ala Glu Glu Leu Ser Arg Ile Leu Glu Lys Arg Lys His Thr
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Gln Leu Val Glu Gln Leu Asp Glu Ser Ser Val
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&lt;211&gt; 1062

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2635

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&lt;210&gt; 2636

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<211> 263

<212> PRT

<213> Homo sapiens

<400> 2638

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Arg	Asp	Leu	Trp	Met	Phe	Ile	Phe	Ser	Asp	Thr	Met	Leu	Leu	Asn	Ile
			100						105					110	
Pro	Leu	Val	Met	Asn	Asn	Glu	Arg	His	Lys	Gly	Glu	Met	Ala	Tyr	Ile
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Val	Val	Gln	Asn	His	Met	Asn	Leu	Ser	Glu	Asn	Ala	Ser	Asn	Asn	Val
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Glu	Pro	Gln	Glu	Glu	Leu	Leu	Gln	Cys	Tyr	Leu	Lys	Asp	Phe	Ile	Leu
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<212> DNA

<213> Homo sapiens

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<210> 2640

<211> 645

<212> PRT

<213> Homo sapiens

<400> 2640

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Gln	Tyr	Thr	Asp	Arg	Leu	Glu	Leu	Gln	Pro	Gly	Ala	Ala	Ser	Gln	Phe
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Ile	Ala	Ala	Thr	Pro	Thr	Ser	Leu	Met	Glu	Ala	Gln	Ala	Glu	Gly	Pro
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Leu	Thr	Ala	Ile	Thr	Ile	Pro	Arg	Pro	Ser	Val	Ala	Ser	Thr	Gln	Ser
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Thr	Ser	Gly	Ser	Phe	His	Cys	Gly	Gln	Gln	Pro	Glu	Lys	Glu	Asp	Leu
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Gln	Pro	Met	Glu	Pro	Thr	Val	Glu	Leu	Tyr	Ser	Pro	Arg	Glu	Asn	Phe
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Ser	Gly	Leu	Val	Val	Thr	Glu	Gly	Glu	Pro	Pro	Ser	Gly	Gly	Ser	Arg
		115				120						125			
Thr	Asp	Leu	Gly	Leu	Gln	Ile	Asp	His	Ile	Gly	His	Asp	Met	Leu	Pro
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Asn	Ile	Arg	Glu	Ser	Asn	Lys	Ser	Gln	Asp	Leu	Gly	Pro	Lys	Glu	Leu
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Pro	Asp	His	Asn	Arg	Leu	Val	Val	Arg	Glu	Phe	Glu	Asn	Leu	Pro	Gly
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Glu	Thr	Glu	Glu	Lys	Ser	Ile	Leu	Leu	Glu	Ser	Asp	Asn	Glu	Asp	Glu
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Lys	Leu	Ser	Arg	Gly	Gln	His	Cys	Ile	Glu	Ile	Ser	Ser	Leu	Pro	Gly
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Asp	Leu	Val	Ile	Val	Glu	Lys	Asp	His	Ser	Ala	Thr	Thr	Glu	Pro	Leu
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Asp	Val	Thr	Lys	Thr	Gln	Thr	Phe	Ser	Val	Val	Pro	Asn	Gln	Asp	Lys
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Asn	Asn	Glu	Ile	Met	Lys	Leu	Leu	Thr	Val	Gly	Thr	Ser	Glu	Ile	Ser
			245					250					255		
Ser	Arg	Asp	Ile	Asp	Pro	His	Val	Glu	Gly	Gln	Ile	Gly	Gln	Val	Ala

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Asp Leu Pro Gly His Gln Gly Asp Leu Ser Thr Phe Leu His Gln Glu					
	290		295		300
Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys					
305		310		315	320
Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg					
	325		330		335
Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu					
	340		345		350
Ile Asp Ser Thr Leu Glu Ser Ser Ser Pro Val Ser Ala Lys Glu Lys					
	355		360		365
Leu Leu Gln Lys Lys Ala Tyr Gln Pro Asp Leu Val Lys Leu Leu Val					
	370		375		380
Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser					
385		390		395	400
Asp Lys Leu Leu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys					
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Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His					
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Leu Ser Arg Ser Ala Glu Asp Ser Phe Leu Ser Pro Ile Ile Ser Gln					
	435		440		445
Ser Arg Lys Ser Lys Ile Pro Arg Pro Val Ser Trp Val Asn Thr Asp					
	450		455		460
Gln Val Asn Ser Ser Thr Ser Ser Gln Phe Phe Pro Arg Pro Pro Pro					
465		470		475	480
Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr					
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Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu					
	500		505		510
Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln					
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Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser					
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Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser					
545		550		555	560
Leu Pro Arg Thr Ser Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His					
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His Asp Gln Arg Ser Ser Ser Pro His Leu Gly Arg Ser Lys Ser Pro					
	580		585		590
Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu					
	595		600		605
His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His					
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&lt;210&gt; 2641

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<213> Homo sapiens

<400> 2642

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			20					25					30		
Val	Thr	Val	Arg	Ile	His	Gly	Ser	Met	Leu	Arg	Ala	His	Arg	Cys	Val
			35				40					45			
Leu	Ala	Ala	Gly	Ser	Pro	Phe	Phe	Gln	Asp	Lys	Leu	Leu	Leu	Gly	Tyr
	50					55				60					
Ser	Asp	Ile	Glu	Ile	Pro	Ser	Val	Val	Ser	Val	Gln	Ser	Val	Gln	Lys
65					70				75					80	
Leu	Ile	Asp	Phe	Met	Tyr	Ser	Gly	Val	Leu	Arg	Val	Ser	Gln	Ser	Glu
			85					90					95		
Ala	Leu	Gln	Ile	Leu	Thr	Ala	Ala	Ser	Ile	Leu	Gln	Ile	Lys	Thr	Val
		100						105				110			
Ile	Asp	Glu	Cys	Thr	Arg	Ile	Val	Ser	Gln	Asn	Val	Gly	Asp	Val	Phe
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Pro	Gly	Ile	Gln	Asp	Ser	Gly	Gln	Asp	Thr	Pro	Arg	Gly	Thr	Pro	Glu
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Ser	Gly	Thr	Ser	Gly	Gln	Ser	Ser	Asp	Thr	Glu	Ser	Gly	Tyr	Leu	Gln

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&lt;210&gt; 2643

&lt;211&gt; 4590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2643

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<212> PRT

<213> Homo sapiens

<400> 2644

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Arg	Pro	Asn	Leu	Thr	Ser	His	Pro	Asp	Gly	Ser	Glu	Asp	Leu	Glu	Pro
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Leu	Ala	Gly	Gly	Ser	Pro	Glu	Ala	Thr	Ser	Pro	Asp	Val	Thr	Glu	Thr
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Lys	Asn	Ser	Pro	Leu	Met	Glu	Asp	Phe	Phe	Glu	Glu	Gly	Phe	Ser	Gln
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Glu	Ile	Ile	Glu	Met	Leu	Ser	Lys	Asp	Gly	Phe	Trp	Asn	Ser	Asn	Phe
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Gly	Glu	Ala	Cys	Ile	Glu	Asp	Thr	Trp	Leu	Asp	Ser	Leu	Leu	Gly	Asp
		115					120					125			
Pro	Glu	Ser	Leu	Leu	Arg	Ser	Asp	Ile	Ala	Thr	Asn	Gly	Glu	Ser	Pro
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Thr	Glu	Cys	Lys	Ser	His	Glu	Leu	Lys	Arg	Gly	Leu	Ser	Pro	Val	Ser
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Thr	Leu	Thr	Pro	Ala	Lys	Ser	Lys	Glu	Tyr	Arg	Gly	Glu	Phe	Phe	Ser
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Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
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Thr	Gln	His	Trp	Ile	Thr	His	Thr	Arg	Glu	Lys	Pro	Thr	Val	His	Gln
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385	390	395
Glu Pro Tyr Lys Cys Asn Glu	Arg Gly Lys Ser Phe Arg His Asn Ser	400
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Thr Leu Lys Ile His Gln Arg	Val His Ser Gly Glu Lys Pro Tyr Lys	
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Cys Ser Glu Cys Gly Lys Ala	Phe His Arg His Thr His Leu Asn Glu	
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His Arg Arg Ile His Thr Gly	Tyr Arg Pro His Lys Cys Gln Glu Cys	
450	455	460
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465	470	475
His Thr Ala Glu Lys Pro Tyr	Ser Cys Ala Glu Cys Lys Glu Thr Phe	
485	490	495
Ser Asp Asn Asn Arg Leu Val	Gln His Gln Lys Met His Thr Val Lys	
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Thr Leu Lys Cys His Glu Ser	Val His Ala Arg Glu Lys Gln Gly Phe	
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Cys Phe Lys Cys Asn Lys Cys	Glu Lys Thr Phe Ser Cys Ser Lys Tyr	
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Leu Thr Gln Tyr Glu Arg Ile	His Thr Arg Gly Val Lys Pro Phe Glu	
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His Gln Arg Ile His Ser Arg	Val Arg Leu Tyr Lys Trp Gly Glu Gln	
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Thr Gly Glu Lys Pro Tyr Val	Cys Gln Glu Cys Gly Lys Ala Phe Thr	
755	760	765
Gln Ser Ser Cys Leu Ser Ile	His Arg Arg Val His Thr Gly Glu Lys	
770	775	780
Pro Tyr Arg Cys Gly Glu Cys	Gly Lys Ala Phe Ala Gln Lys Ala Asn	



785		790		795		800									
Leu	Thr	Gln	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ser	Cys
				805					810					815	
Asn	Val	Cys	Gly	Lys	Ala	Phe	Val	Leu	Ser	Ala	His	Leu	Asn	Gln	His
			820					825					830		
Leu	Arg	Val	His	Thr	Gln	Glu	Thr	Leu	Tyr	Gln	Cys	Gln	Arg	Cys	Gln
		835					840					845			
Lys	Ala	Phe	Arg	Cys	His	Ser	Ser	Leu	Ser	Arg	His	Gln	Arg	Val	His
	850					855					860				
Asn	Lys	Gln	Gln	Tyr	Cys	Leu									
865					870										

&lt;210&gt; 2645

&lt;211&gt; 1018

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2645

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1018

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&lt;210&gt; 2646

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 <212> PRT  
 <213> Homo sapiens

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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
 35 40 45  
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn  
 50 55 60  
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
 65 70 75 80  
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
 85 90 95  
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
 100 105 110  
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala  
 115 120 125  
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
 130 135 140  
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
 145 150 155 160  
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
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 Ser Gly Ser His Lys Arg Ser  
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<210> 2647  
 <211> 1368  
 <212> DNA  
 <213> Homo sapiens

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 1368

&lt;210&gt; 2648

&lt;211&gt; 389

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2648

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 20 25 30  
 Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu Ala  
 35 40 45  
 Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser Trp  
 50 55 60  
 Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu  
 65 70 75 80  
 Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly  
 85 90 95  
 Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu  
 100 105 110  
 Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu  
 115 120 125  
 Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

130		135		140	
Pro Ser Gly Asp Ala Phe	Ser Ser Val Gly Thr	His Arg Phe Val Gln			
145		150		155	160
Lys Val Glu Glu Met Val	Gln Asn His Met Thr	Tyr Ser Leu Gln Asp			
		165		170	175
Val Gly Gly Asp Ala Asn	Trp Gln Leu Val Val	Glu Glu Gly Glu Met			
		180		185	190
Lys Val Tyr Arg Arg Glu	Val Glu Glu Asn Gly	Ile Val Leu Asp Pro			
		195		200	205
Leu Lys Ala Thr His Ala	Val Lys Gly Val Thr	Gly His Glu Val Cys			
		210		215	220
Asn Tyr Phe Trp Asn Val	Asp Val Arg Asn Asp	Trp Glu Thr Thr Ile			
225		230		235	240
Glu Asn Phe His Val Val	Glu Thr Leu Ala Asp	Asn Ala Ile Ile Ile			
		245		250	255
Tyr Gln Thr His Lys Arg	Val Trp Pro Ala Ser	Gln Arg Asp Val Leu			
		260		265	270
Tyr Leu Ser Val Ile Arg	Lys Ile Pro Ala Leu	Thr Glu Asn Asp Pro			
		275		280	285
Glu Thr Trp Ile Val Cys	Asn Phe Ser Val Asp	His Asp Ser Ala Pro			
		290		295	300
Leu Asn Asn Arg Cys Val	Arg Ala Lys Ile Asn	Val Ala Met Ile Cys			
305		310		315	320
Gln Thr Leu Val Ser Pro	Pro Glu Gly Asn Gln	Glu Ile Ser Arg Asp			
		325		330	335
Asn Ile Leu Cys Lys Ile	Thr Tyr Val Ala Asn	Val Asn Pro Gly Gly			
		340		345	350
Trp Ala Pro Ala Ser Val	Leu Arg Ala Val Ala	Lys Arg Glu Tyr Pro			
		355		360	365
Lys Phe Leu Lys Arg Phe	Thr Ser Tyr Val Gln	Glu Lys Thr Ala Gly			
		370		375	380
Lys Pro Ile Leu Phe					
385					

&lt;210&gt; 2649

&lt;211&gt; 1299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2649

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240
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300
aatgatgtca agcaccatgg ccagttttat gaatggcttc ctgtgtctaa tgaccctgac
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aaccatggt cactcaagt ccaagccaaa ggaacaaccc tgggtgttga actagcacct
420

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1299

&lt;210&gt; 2650

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2650

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Leu	Leu	Phe	Leu	Ala	Phe	Leu	Leu	Leu	Ser	Ser	Arg	Thr	Ala	Arg	Ser
			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35				40					45				
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50				55					60					
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65				70				75					80		
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85					90					95		
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
			100				105				110				
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
		115				120					125				
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

130		135		140	
Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu					
145		150		155	160
Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu					
	165		170		175
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val					
	180		185		190
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr					
	195		200		205
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys					
	210		215		220
Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys					
225		230		235	240
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser					
	245		250		255
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala					
	260		265		270
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser					
	275		280		285
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg					
	290		295		300
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly					
305		310		315	320
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val					
	325		330		335
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys					
	340		345		350
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly					
	355		360		365
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp					
	370		375		380
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile					
385		390		395	400
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly His Pro Gly Ala Cys					
	405		410		415
His Phe Ser Gly Arg Val Glu Met His Val His Pro					
	420		425		

&lt;210&gt; 2651

&lt;211&gt; 628

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2651

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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
			35				40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
			50			55					60				
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70				75					80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85				90					95		
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105				110			
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
			115				120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
					135						140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
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Leu

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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1620



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 1920  
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 1980  
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<210> 2654

<211> 70

<212> PRT

<213> Homo sapiens

<400> 2654

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			20					25					30		
Ser	Asp	Ser	Lys	Cys	Leu	Leu	Leu	Gly	Ala	Val	Ala	His	Ala	Cys	
			35				40				45				
Asn	Pro	Ser	Thr	Leu	Gly	Gly	Arg	Gly	Gly	Arg	Ile	Thr	Arg	Ser	Gly
	50					55					60				
Asp	Arg	Asp	Tyr	Pro	Gly										
65					70										

<210> 2655

<211> 1752

<212> DNA

<213> Homo sapiens

<400> 2655

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 240  
 caagagaatg aagaccttca cgctttctct gtaagttttc attcaaaaca tctttcaatt  
 300  
 tctttttttt cttttttctt ttttttgccc tcatttttagt tagtttgagt ttcttgtggc  
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420  
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1752

&lt;210&gt; 2656

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2656

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Ala Gln Gln Ile Leu Asn Leu Pro Glu Ile Val Phe Tyr Glu Leu Glu
 20           25           30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
 35           40           45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
 50           55           60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
 65           70           75           80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
 85           90           95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
100           105           110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
115           120           125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
130           135           140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145           150           155           160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
165           170           175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
180           185           190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
195           200           205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
210           215           220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225           230           235           240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
245           250           255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
260           265           270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
275           280           285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290           295           300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305           310           315           320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325           330           335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340           345           350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355           360           365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370           375           380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385           390           395           400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405           410           415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435		440		445										
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450		455		460										
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
465			470		475									480	
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
	485		490												

&lt;210&gt; 2657

&lt;211&gt; 972

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2657

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180
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aggagcctca aaactgaaat gcacgtgctt cggaaccagcc atccgtgect gacaatgtcc
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420
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480
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720
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780
ccagcacc aa gcatgcatgg ttggtgatgt ggaacttacg cagagcgtgg cggctgggca
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972

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&lt;210&gt; 2658

&lt;211&gt; 76

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2658

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Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile
 1           5           10           15
Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
      20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
      35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagagggtgg aggccctccc gagggccggt cgcagaacc tgccacagcc acagatgccca
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tgcggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
360
gtcaactatg acttcgggtcc catccacatg cccctggagc acaacctgcc catgcacttt
420
ggccccccagc cgcggcatcg cttctgatgg ccccgaatcc ccattgagca gcacaaagcc
480
cgtttggggg aggagtgtgg atggagaacc ctcccccaag gctgggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gtaggctggt tttcttccca cccctttcct agaagggtta
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660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10           15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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		20						25					30				
Gln	Arg	Val	Glu	Ala	Leu	Pro	Arg	Pro	Val	Pro	Gln	Asn	Leu	Pro	Gln		
		35					40					45					
Pro	Gln	Met	Pro	Pro	Tyr	Ala	Phe	Ala	His	Pro	Pro	Phe	Pro	Leu	Pro		
		50				55					60						
Pro	Val	Arg	Pro	Val	Phe	Asn	Asn	Phe	Pro	Leu	Asn	Met	Gly	Pro	Ile		
65					70					75					80		
Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp		
				85				90					95				
Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe		
			100					105					110				
Gly	Pro	Gln	Pro	Arg	His	Arg	Phe										
		115					120										

&lt;210&gt; 2661

&lt;211&gt; 1395

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2661

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 120  
 gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg  
 180  
 aatcacgat ctcttatact cctggatgaa tgcagtaagg tggctcctaga taatatccat  
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 300  
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 360  
 ttcagaaaag ttctttttat cctcatttta tttgaaaacc ttggctttcg acctgttggg  
 420  
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 480  
 attctatcta ttcttcatac ttactcttct ctcaatcatg tctacaaatg ccagaacaaa  
 540  
 gaacagttcg tggaagttat ggctagtgtc ctgactgggt atcttcacac tatttcttct  
 600  
 gaaaacttat tggatgcagt atattcattt tgcttgatga attactttcc cctggtcct  
 660  
 tttaatcagc ttctgcaaaa agacatcatc agtgagctgc tgacatcaga tgacatgaag  
 720  
 aatgcttaca agctgcatac tttggatact tgtctaaaac ttgatgatac tgtctatctg  
 780  
 agggacatag ccttgtcact cccacagctg ccgctgggagc tgccatcgtc acatacaaat  
 840  
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 900  
 gtgcacttgc cacacaatta tcatattgat tttgaaatca gaatggacac taacaggaat  
 960  
 caagtgtac cactttctga tgtggataga acttctgcta cagatattca aagagtagct  
 1020

gtgctatgtg tttccagatc tgcttattgt ttgggttcaa gccaccccag aggattcctt  
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 ccttttcata ttaggagaca tgcatttgta aaaattaata aagatgacaa gtcagttgtc  
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
			35				40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
			50			55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70					75					80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
				85				90						95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
			115				120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
	130					135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150						155				160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
			165					170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
	195					200						205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
	210				215						220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
			245					250						255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

	260		265		270										
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
	275		280		285										
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro
	290		295		300										
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
305				310					315					320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
			325					330						335	
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
		340						345					350		
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355				360							365			
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370				375						380				
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
385				390						395					400
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
			405					410						415	

&lt;210&gt; 2663

&lt;211&gt; 1024

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2663

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720
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780
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840

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<210> 2664  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 2664  
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
 35 40 45  
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn  
 50 55 60  
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
 65 70 75 80  
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
 85 90 95  
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
 100 105 110  
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala  
 115 120 125  
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
 130 135 140  
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
 145 150 155 160  
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
 165 170 175  
 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala  
 180 185 190  
 Ser Gly Ser His Lys Arg Ser  
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<210> 2665  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 2665  
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 120  
 gcgccaatgc gaagcgttgc agtcgcttga ctcacctgag gctctccaag gataccttca  
 180

atgcctgcac tgtaagggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt  
 240  
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 300  
 caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgac  
 360  
 caggctgtgg aagcttttcaa gacagccaag gagcccatag tgggtgcaggt gttgagaaga  
 420  
 acaccaagga ccaaagtgtt cacgcctcca tcagagtctc agctggtgga cacgggaacc  
 480  
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
			35				40					45			
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			50			55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70				75					80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
				85				90						95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
			115				120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
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<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

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			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
		35					40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55					60				
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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Leu	Cys	Cys	Phe	Ser	Cys	Ile	Arg	Arg	Trp	Leu	Thr	Glu	Gln	Arg	Ala
			50			55					60				
Gln	Cys	Pro	His	Cys	Arg	Ala	Pro	Leu	Gln	Leu	Arg	Glu	Leu	Val	Asn
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Cys	Arg	Trp	Ala	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu	
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Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe
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Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu
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			195			200						205			
Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr
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1913

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Ser	Gly	Asp	Met	Gln	Thr	Ser	Leu	Phe	Ser	Ala	Asp	Gln	Ala	Ala	Leu
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Ile	Gly	Asp	Ile	Leu	Pro	Lys	Thr	Glu	Asp	Arg	Gln	Cys	Lys	Ala	Leu
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Ser Gly Arg

&lt;210&gt; 2671

&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2671

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240



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<211> 223

<212> PRT

<213> Homo sapiens

<400> 2672

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Lys	Asp	Ser	Arg	Ala	Val	Ser	Arg	His	Gly	Arg	Gly	Asn	Cys	Gly	Ala
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<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg	1	5	10	15
Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser	20	25	30	
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met	35	40	45	
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn	50	55	60	
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln	65	70	75	80
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr	85	90	95	
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr	100	105	110	
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala	115	120	125	
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys	130	135	140	
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe	145	150	155	160
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile	165	170	175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val	180	185	190	
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile	195	200	205	
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val	210	215	220	
Tyr	Tyr	Gln	Ile	Arg	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu		225	230	235	240
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser	245	250	255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val				

	260		265		270
Lys Arg Pro Gly Thr Ile Arg Lys Ala Gln Asn Leu Leu Lys Gln Tyr					
275		280		285	
Ser Gln His Gly Leu Asp Gly Lys Lys Gly Gly Ser Asn Leu Ile Pro					
290		295		300	
Leu Glu Gly Arg Asp Asp Met Leu Asp Val Glu Thr Asp Ala Tyr Ile					
305		310		315	320
His Cys Val Ser Ala Phe Val Lys Leu Ala Gln Ser Glu Tyr Gln Leu					
	325		330		335
Leu Ala Asp Ile Ile Pro Glu His His Gln Lys Lys Thr Phe Asp Ser					
	340		345		350
Leu Ile Gln Asp Ala Leu Asp Gly Leu Met Leu Glu Gly Glu Asn Ile					
	355		360		365
Val Ser Ala Ala Arg Lys Ala Ile Val Arg His Asp Phe Ser Thr Val					
	370		375		380
Leu Thr Val Phe Pro Ile Leu Arg His Leu Lys Gln Thr Lys Pro Glu					
385		390		395	400
Phe Asp Gln Val Leu Gln Gly Thr Ala Ala Ser Thr Lys Asn Lys Leu					
	405		410		415
Pro Gly Leu Ile Thr Ser Met Glu Thr Ile Gly Ala Lys Ala Leu Glu					
	420		425		430
Asp Phe Ala Asp Asn Ile Lys Asn Asp Pro Asp Lys Glu Tyr Asn Met					
	435		440		445
Pro Lys Asp Gly Thr Val His Glu Leu Thr Ser Asn Ala Ile Leu Phe					
	450		455		460
Leu Gln Gln Leu Leu Asp Phe Gln Glu Thr Ala Gly Ala Met Leu Ala					
465		470		475	480
Ser Gln Glu Thr Ser Ser Ser Ala Thr Ser Tyr Ser Ser Glu Phe Ser					
	485		490		495
Lys Arg Leu Leu Ser Thr Tyr Ile Cys Lys Val Leu Gly Asn Leu Gln					
	500		505		510
Leu Asn Leu Leu Ser Lys Ser Lys Val Tyr Glu Asp Pro Ala Leu Ser					
	515		520		525
Ala Ile Phe Leu His Asn Asn Tyr Asn Tyr Ile Leu Lys Ser Leu Glu					
	530		535		540
Lys Ser Glu Leu Ile Gln Leu Val Ala Val Thr Gln Lys Thr Ala Glu					
545		550		555	560
Arg Ser Tyr Arg Glu His Ile Glu Gln Gln Ile Gln Thr Tyr Gln Arg					
	565		570		575
Ser Trp Leu Lys Val Thr Asp Tyr Ile Ala Glu Lys Asn Leu Pro Val					
	580		585		590
Phe Gln Pro Gly Val Lys Leu Arg Asp Lys Glu Arg Gln Ile Ile Lys					
	595		600		605
Glu Arg Phe Lys Gly Phe Asn Asp Gly Leu Glu Glu Leu Cys Lys Ile					
	610		615		620
Gln Lys Ala Trp Ala Ile Pro Asp Thr Glu Gln Arg Asp Arg Ile Arg					
625		630		635	640
Gln Ala Gln Lys Thr Ile Val Lys Glu Thr Tyr Gly Ala Phe Leu Gln					
	645		650		655
Lys Phe Gly Ser Val Pro Phe Thr Lys Asn Pro Glu Lys Tyr Ile Lys					
	660		665		670
Tyr Gly Val Glu Gln Val Gly Asp Met Ile Asp Arg Leu Phe Asp Thr					
	675		680		685
Ser Ala					

690

&lt;210&gt; 2675

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2675

```

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tgtgggcatg ctgctcatct acgtgggggt gcgcgccgtc agcgtcctgg tagagtggca
120
gcagtgggag tccctgcgct tggcggaata tggagacct ctgcagtgtg gagcctgggt
180
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240
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420
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480
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660
cagaggtcat cccacagcat cgttccttac cctctctctg cccttcaccc g
711

```

&lt;210&gt; 2676

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2676

```

Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
 1             5             10            15
Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
      20             25             30
Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
      35             40             45
Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Leu Gln Trp
      50             55             60
Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
65             70             75            80
Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
      85             90             95
Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
      100            105            110
Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

```

      115      120      125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu
      130      135      140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
145      150      155      160
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
      165      170      175
Gly Leu Pro Val
      180

```

<210> 2677  
 <211> 735  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2677
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120
gagccccctt tgcagggcag gagctgggga gtggttagga catcagtccc tcaggtaggg
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240
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735

```

<210> 2678  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2678
Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
1      5      10      15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
20      25      30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```



```

          35          40          45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
   50          55          60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
   65          70          75          80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
          85          90          95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
          100          105          110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
          115          120          125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
          130          135          140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
   145          150          155          160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
          165          170

```

&lt;210&gt; 2679

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2679

```

agccgcccc cctcctgttc cattataatc ttatcttggg tatgttgata caacacaatc
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tgtccttcca agtgatcacc ggagtccaga tatttctgtc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacaggggact ccaccaggcc atggagctca tcccacaaga
180
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540
cgtcagactg agggacgcgt
560

```

&lt;210&gt; 2680

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2680

```

Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
   1           5           10          15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

                20                25                30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
                35                40                45
Leu Val Ser Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
                50                55                60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
65                70                75                80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
                85                90                95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
                100                105                110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
                115                120                125
Arg Leu Arg Asp Ala
                130

```

&lt;210&gt; 2681

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2681

```

gattctctag tagccctaata tctacccatc tggctactaa ttcaaacttt cttccttcac
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atctgtttgt ggacttctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atggggcaag cctcacaagc
180
cccgagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
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300
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360
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420
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480
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540
ggtttttctt cttgtaactt ttcttctctc agctttctca agctt
585

```

&lt;210&gt; 2682

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1                5                10                15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
20                25                30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

          35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
   50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
          85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
          100          105          110
Met Val Met Lys
          115

```

&lt;210&gt; 2683

&lt;211&gt; 498

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2683

```

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60
atcacctgga tggccaacca cactggaagg ttggatttca tctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtgtg gtcactcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca caccctcatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccagggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcagggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

&lt;210&gt; 2684

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
  20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
  35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
  50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

[illegible]

<210> 2685

&lt;211&gt; 391

<212> DNA

<213> Homo sapiens

<400> 2685

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120
ctctacctca  caggcaaccg  actgcgaagc  cgggccctgg  gcccccgctg  ctgggtggac
180
ctgccccatc  tgcagttgct  ggacatcgcc  gggaatcagc  tcacagagat  cccggagggg
240
ctccccccat  cgctggagta  tctgtacctg  cagaataaca  agattagcgc  tgttcctgcc
300
agcgcctttg  actctactcc  caacctcaag  gggatctttc  tcaggttcaa  caagctggct
360
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391

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&lt;210&gt; 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

[illegible]

130

&lt;210&gt; 2687

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2687

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399

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&lt;210&gt; 2688

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2688

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Pro Pro Asp Ser Pro Leu Gly Leu Met Leu Arg Tyr Arg Lys Asp Asn
20           25           30
Glu Arg Thr Lys His Lys Lys Arg Gln Gln Met Ile Lys Tyr Cys Trp
35           40           45
Phe Ile Trp Thr Lys Glu Pro Ile Leu Lys Pro Leu Val Phe Trp Pro
50           55           60
Gln Leu Gly Leu Ser Gly Asp Trp Ile Cys Gln Leu Leu Ile Gln Tyr
65           70           75           80
Val Lys Asp Lys Ser Pro Val Ser Gln Glu Glu
85           90

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&lt;210&gt; 2689

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

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120
tcaaaactct ggctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag
180

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 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

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Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
			20					25					30		
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
		35				40						45			
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
65					70										

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

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 120  
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 180  
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tccacgattt tcccaagtac  
 240  
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 420  
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<212> PRT  
<213> Homo sapiens

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Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser  
35 40 45  
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met  
50 55 60  
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr  
65 70 75 80  
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn  
85 90 95  
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr  
100 105 110  
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala  
115 120 125  
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu  
130 135 140  
Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg  
145 150 155 160  
Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro  
165 170 175  
Arg

<210> 2693  
<211> 798  
<212> DNA  
<213> Homo sapiens

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180  
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300  
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 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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Arg	Ile	Gln	His	Leu	Gly	Thr	His	Ser	Phe	Glu	Gly	Leu	His	Asn	Leu	20		25		30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala	35		40		45		
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn	50		55		60		
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln	65		70		75		80
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala	85		90		95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met	100		105		110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile	115		120		125		
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys	130		135		140		
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile	145		150		155		160
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly	165		170		175		
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln	180		185		190		
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser	195		200		205		
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp	210		215		220		
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly	225		230		235		240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe	245		250		255		
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile													



260

265

&lt;210&gt; 2695

&lt;211&gt; 2265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2695

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1380

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 2265

&lt;210&gt; 2696

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2696

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Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
			35				40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
			50			55					60				
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65				70					75					80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85					90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100				105					110			
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
			115				120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130		135		140
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu				
145		150		155
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp				
	165		170	175
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp				
	180		185	190
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met				
	195		200	205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys				
	210		215	220
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val				
225		230		235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe				
	245		250	255
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu				
	260		265	270
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser				
	275		280	285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro				
	290		295	300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu				
305		310		315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile				
	325		330	335
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met				
	340		345	350
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe				
	355		360	365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val				
	370		375	380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly				
385		390		395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val				
	405		410	415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp				
	420		425	430
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln				
	435		440	445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser				
	450		455	460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro				
465		470		475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser				
	485		490	495
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala				
	500		505	510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn				
	515		520	525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg				
	530		535	540
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala				
545		550		555
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe				

				565				570				575			
Ser	Lys	Ala	Glu	Ala	Phe	Phe	Pro	Asn	Met	Val	Asn	Met	Leu	Val	Leu
				580				585				590			
Gly	Lys	His	Leu	Gly	Ile	Pro	Lys	Pro	Phe	Gly	Pro	Val	Ile	Asn	Gly
				595				600				605			
Arg	Cys	Cys	Leu	Glu	Glu	Lys	Val	Cys	Ser	Leu	Leu	Glu	Pro	Leu	Gly
				610				615				620			
Leu	Gln	Cys	Thr	Phe	Ile	Asn	Asp	Phe	Phe	Thr	Tyr	His	Ile	Arg	His
				625				630				635			
Gly	Glu	Val	His	Cys	Gly	Thr	Asn	Val	Arg	Arg	Lys	Pro	Phe	Ser	Phe
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Lys	Trp	Trp	Asn	Met	Val	Pro									
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<210> 2697
<211> 2468
<212> DNA
<213> Homo sapiens
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240
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1980  
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2460  
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2468

&lt;210&gt; 2698

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2698

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 1           5           10           15
Pro Asn Ile Asn Ile Lys Glu Pro Arg Trp Asp Gln Ser Thr Phe Ile
      20           25           30
Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu
      35           40           45
Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
      50           55           60
Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
65           70           75           80
Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
      85           90           95
Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
      100          105          110
Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
      115          120          125
Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
      130          135          140
Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
145          150          155          160
Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
      165          170          175
Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
      180          185          190
Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
      195          200          205
Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
      210          215          220
Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
225          230          235          240
Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
      245          250          255
Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
      260          265          270
Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
      275          280          285
Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
      290          295          300
Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His
305          310          315          320
Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu
      325          330

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&lt;210&gt; 2699

&lt;211&gt; 974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2699

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60

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 240  
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 300  
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 360  
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 420  
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 540  
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 840  
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 960  
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<210> 2700

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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Pro	Glu	Leu	Pro	Asp	Ile	Leu	Lys	Gln	Phe	Thr	Lys	Ala	Ala	Ile	Arg
			20					25						30	
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
		35					40					45			
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
	50					55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65					70					75				80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85						90					95	
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100					105						110	
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

[illegible]

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<210> 2701
<211> 646
<212> DNA
<213> Homo sapiens
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120
agcacactga gaggatgatt taagaaaaac tggctgggca cgggtgtcca tgacctgtaat
180
cccagcactt tgggaggcca aaatgccagc agctcttctt tgccagagat gatctgacct
240
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300
agatggtgct tgagaaccga ggcccgggtga tcttccagcc acagtccagc ccaaccactg
360
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420
gggcccggag accaggagag cgcctggaag cagtacctgg aggacgagag gatcgcgctt
480
ttcttgcaga acgaggagtt catgaaggaa ctgcaacgga accgcgactt cctcctcgct
540
ctggagagag atcgattgaa atacgaatcc cagaaatcta aatccagcag cgtggctgtc
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646

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<210> 2702
<211> 92
<212> PRT
<213> Homo sapiens
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<400> 2702
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Leu Gly Pro Gly Asp Gln Glu Ser Arg Trp Lys Gln Tyr Leu Glu Asp
          20             25             30
Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
          35             40             45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
          50             55             60
Tyr Glu Ser Gln Lys Ser Lys Ser Ser Ser Val Ala Val Gly Asn Asp

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<210> 2705  
 <211> 843  
 <212> DNA  
 <213> Homo sapiens

<400> 2705  
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 360  
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 420  
 ctcacattct acaggaagac cccaaccgtg gtgttctggc agtgggtgaa tcagtccttc  
 480  
 aatgccattg ttaactactc caaccgcagt ggtgacactc ccatcactgt gaggcagctg  
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 720  
 actgatgaag ctggtcagag acttggccac tcggtgactg ctgccaaaca gggcatcttc  
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 843

<210> 2706  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 2706  
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 Thr Val Thr Asp Pro Arg Asn Leu Leu Ser Gly Ala Gln Leu Glu  
 35 40 45  
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro  
 50 55 60  
 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser  
 65 70 75 80  
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

				85					90					95			
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr		
			100					105						110			
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln		
			115				120					125					
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro		
			130			135					140						
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly		
145					150					155					160		
Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro		
				165					170					175			
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn		
			180					185						190			
Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile		
		195					200					205					
Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala		
			210			215					220						
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala		
225					230					235					240		
Ile	Pro	Ala	Met	Ala	Ile	Pro	Pro	Val	Ile	Met							
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<210> 2707

&lt;211&gt; 2921

<212> DNA

<213> Homo sapiens

<400> 2707

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120					
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180					
gtgccccagg	accttacgca	gccaacgtac	accggggcca	ttatctccat	ctgctgctgc
240					
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300					
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360					
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420					
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540					
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660					
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720					
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780					

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900  
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960  
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2100  
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2160  
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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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			20					25					30		
Ala	Ala	Arg	Leu	Ala	Cys	Ser	Ala	Pro	Thr	Pro	Gly	Gly	Gly	Thr	Met
			35				40					45			
Pro	Phe	Asp	Phe	Arg	Arg	Phe	Asp	Ile	Tyr	Arg	Lys	Val	Pro	Lys	Asp
	50					55					60				
Leu	Thr	Gln	Pro	Thr	Tyr	Thr	Gly	Ala	Ile	Ile	Ser	Ile	Cys	Cys	Cys
65					70					75				80	
Leu	Phe	Ile	Leu	Phe	Leu	Phe	Leu	Ser	Glu	Leu	Thr	Gly	Phe	Ile	Thr
			85						90					95	
Thr	Glu	Val	Val	Asn	Glu	Leu	Tyr	Val	Asp	Asp	Pro	Asp	Lys	Asp	Ser
			100					105					110		
Gly	Gly	Lys	Ile	Asp	Val	Ser	Leu	Asn	Ile	Ser	Leu	Pro	Asn	Leu	His
		115					120					125			
Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
	130					135					140				
Val	Gly	His	Ile	Asp	Asn	Ser	Met	Lys	Ile	Pro	Leu	Asn	Asn	Gly	Ala
145					150					155				160	
Gly	Cys	Arg	Phe	Glu	Gly	Gln	Phe	Ser	Ile	Asn	Lys	Val	Pro	Gly	Asn
			165					170						175	
Phe	His	Val	Ser	Thr	His	Ser	Ala	Thr	Ala	Gln	Pro	Gln	Asn	Pro	Asp
		180						185					190		
Met	Thr	His	Val	Ile	His	Lys	Leu	Ser	Phe	Gly	Asp	Thr	Leu	Gln	Val
	195						200					205			
Gln	Asn	Ile	His	Gly	Ala	Phe	Asn	Ala	Leu	Gly	Gly	Ala	Asp	Arg	Leu
	210					215					220				
Thr	Ser	Asn	Pro	Leu	Ala	Ser	His	Asp	Tyr	Ile	Leu	Lys	Ile	Val	Pro

225					230					235					240
Thr	Val	Tyr	Glu	Asp	Lys	Ser	Gly	Lys	Gln	Arg	Tyr	Ser	Tyr	Gln	Tyr
				245					250					255	
Thr	Val	Ala	Asn	Lys	Glu	Tyr	Val	Ala	Tyr	Ser	His	Thr	Gly	Arg	Ile
			260					265					270		
Ile	Pro	Ala	Ile	Trp	Phe	Arg	Tyr	Asp	Leu	Ser	Pro	Ile	Thr	Val	Lys
		275					280				285				
Tyr	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Tyr	Arg	Phe	Ile	Thr	Thr	Ile	Cys
	290				295				300						
Ala	Ile	Ile	Gly	Gly	Thr	Phe	Thr	Val	Ala	Gly	Ile	Leu	Asp	Ser	Cys
305					310				315						320
Ile	Phe	Thr	Ala	Ser	Glu	Ala	Trp	Lys	Lys	Ile	Gln	Leu	Gly	Lys	Met
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His															

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<210> 2709
<211> 984
<212> DNA
<213> Homo sapiens
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<400> 2709
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120
atcactctgg attttgatgg tgatgacctc ctataaacag gtaaaaatgt gaaaattaca
180
gattctgaag caagtaagcc aaaagatggg caggacgcc a ttgcacagag cccggagaag
240
gaaagcaagg attatgagat gaatgcgaac cataaagatg gtaagaagga agactgcgtg
300
aagggtgacc ctgtcgagaa ggaagccaga gaaagttcta agaaagcaga atctggagac
360
aaagaaaagg atactttgaa gaaagggccc tcgtctactg gggcctctgg tcaagcaaag
420
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480
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540
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600
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660
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720
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780
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840
agcaagacac aagcctctgt caaaaaagaa gagaaaagat cgtctgagaa atctgaaaaa
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aaagaaagca aggatactaa gaaaatagaa ggtaaagatg agaagaatga taatggagca
960

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agtggccaaa catcagaatc gatt  
984

<210> 2710  
<211> 242  
<212> PRT  
<213> Homo sapiens

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Gly Asp Lys Glu Lys Asp Thr Leu Lys Lys Gly Pro Ser Ser Thr Gly  
35 40 45  
Ala Ser Gly Gln Ala Lys Ser Ser Ser Lys Glu Ser Lys Asp Ser Lys  
50 55 60  
Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser  
65 70 75 80  
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn  
85 90 95  
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val  
100 105 110  
Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys  
115 120 125  
Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile  
130 135 140  
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu  
145 150 155 160  
Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp  
165 170 175  
Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp  
180 185 190  
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Leu Asn Gly Ser Gln Glu Glu Met Trp Gln Lys Thr Glu Ser Val Lys			
	1555	1560	1565
Gln Glu Asn Ala Ala Val Leu Lys Met Val Glu Asn Leu Lys Lys Gln			
	1570	1575	1580
Ile Ser Glu Leu Lys Ile Lys Asn Gln Gln Leu Asp Leu Glu Asn Thr			
	1585	1590	1595
Glu Leu Ser Gln Lys Asn Ser Pro Asn Gln Glu Lys Leu Gln Glu Leu			
	1605	1610	1615
Asn Gln Leu Leu Thr Glu Met Leu Cys Gln Lys Glu Lys Glu Pro Gly			
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Glu Asn Pro Leu Leu Gln Asp Glu Leu Glu Lys Met Lys Gln Leu His			
	1685	1690	1695
Arg Cys Pro Asp Leu Ser Asn Phe Gln Gln Lys Ile Ser Ser Val Leu			

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Ala	Ser	Leu	Lys	Thr	Gln	Leu	Val	Ala	Ser	Gln	Glu	Lys	Val	Gln	Asn			
			1765						1770					1775				
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Ser	Asp	Pro	Arg	Val	Thr	Gln	Gln	Glu	Lys	Glu	Ala	Leu	Lys	Gln	Glu			
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Lys	Ala	Glu	Leu	Thr	His	Ser	Arg	Glu	Lys	Val	Arg	Gln	Leu	Glu	Ser			
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Phe	Gln	Lys	Glu	Gln	Ser	Pro	Ala	Asn	Arg	Lys	Val	Ser	Gln	Met	Asn			
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Ser	Leu	Glu	Gln	Glu	Leu	Glu	Thr	Ile	His	Leu	Glu	Asn	Glu	Gly	Leu			
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	1970					1975					1980							
Gln	Leu	Leu	Gln	Gln	Gln	Ala	Cys	Pro	Met	Val	Pro	Arg	Glu	Gln	Phe			
1985				1990						1995					2000			
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<211> 2066

<212> DNA

<213> Homo sapiens



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<211> 214

<212> PRT

<213> Homo sapiens

<400> 2714

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Leu	Val	Glu	Thr	Ser	Gly	Ile	Ser	Ile	Tyr	Arg	Leu	Leu	Asp	Lys	Lys	35	40	45	
Thr	Gly	Leu	Tyr	Glu	Tyr	Lys	Val	Phe	Gly	Val	Leu	Glu	Asp	Cys	Ser	50	55	60	
Pro	Thr	Leu	Leu	Ala	Asp	Ile	Tyr	Met	Asp	Ser	Asp	Tyr	Arg	Lys	Gln	65	70	75	80
Trp	Asp	Gln	Tyr	Val	Lys	Glu	Leu	Tyr	Glu	Gln	Glu	Cys	Asn	Gly	Glu	85	90	95	
Thr	Val	Val	Tyr	Trp	Glu	Val	Lys	Tyr	Pro	Phe	Pro	Met	Ser	Asn	Arg	100	105	110	
Asp	Tyr	Val	Tyr	Leu	Arg	Gln	Arg	Arg	Asp	Leu	Asp	Met	Glu	Gly	Arg	115	120	125	
Lys	Ile	His	Val	Ile	Leu	Ala	Arg	Ser	Thr	Ser	Met	Pro	Gln	Leu	Gly	130	135	140	
Glu	Arg	Ser	Gly	Val	Ile	Arg	Val	Lys	Gln	Tyr	Lys	Gln	Ser	Leu	Ala	145	150	155	160
Ile	Glu	Ser	Asp	Gly	Lys	Lys	Gly	Ser	Lys	Val	Phe	Met	Tyr	Tyr	Phe	165	170	175	
Asp	Asn	Pro	Gly	Gly	Gln	Ile	Pro	Ser	Trp	Leu	Ile	Asn	Trp	Ala	Ala	180	185	190	
Lys	Asn	Gly	Val	Pro	Asn	Phe	Leu	Lys	Asp	Met	Ala	Arg	Ala	Cys	Gln	195	200	205	
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 180  
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 240  
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<210> 2716  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

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 Lys Ile Lys Gln Ile Met His His Phe Ile Pro Asp Leu Leu Phe Ala  
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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Glu Met  
 35 40 45  
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly  
 50 55 60  
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln  
 65 70 75 80  
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn  
 85 90 95  
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu  
 100 105 110  
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<210> 2717  
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 <213> Homo sapiens

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360  
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420  
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480  
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720  
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1320  
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1380  
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1440  
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<210> 2718

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2718

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			20					25				30			
Glu	Gly	Pro	Arg	Pro	Glu	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Ala	Gln
			35				40					45			
Thr	Thr	Gly	Glu	Gly	Ala	Gly	His	Arg	Pro	Leu	Thr	Ile	Leu	His	Pro
			50				55				60				
Lys	Thr	Gly	Gly	Gln	Gly	Ser	Asp	Ala	Thr	Leu	Leu	Phe	Val	Lys	Tyr
65				70						75				80	
Gly	Thr	Thr	Phe	Phe	Val	Leu	Phe	Glu	Val	Ser	Ser	Gly	Ser	Lys	Leu
			85						90				95		
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<210> 2719

<211> 546

<212> DNA

<213> Homo sapiens

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 240  
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 420

gccaccagcg tcctttttga gagcacccca gtttatccca atgctgggtcg gtactgggag  
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<210> 2720  
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 His Val Leu Val Ala His Arg Thr Asp Asn Lys Val His Met Gly Asp  
 35 40 45  
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys  
 50 55 60  
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr  
 65 70 75 80  
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly  
 85 90 95  
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln  
 100 105 110  
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly  
 115 120 125  
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val  
 130 135 140  
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu  
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<210> 2721  
 <211> 5912  
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<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

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Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
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Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
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Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
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Leu	Tyr	Ser	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
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Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
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Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
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Pro	Leu	Gln	Glu	Leu	His	Gln	Met	Ile	Leu	Thr	Pro	Ile	Lys	Ala	Tyr					
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Pro	Arg	Gln	Pro	Ser	Leu	Met	Gly	Pro	Glu	Ser	Gln	Ser	Pro	Asp	Cys					
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Lys	Asp	Gly	Ala	Ala	Ala	Thr	Gly	Ala	Thr	Ala	Thr	Pro	Ser	Ala	Gly					
				245				250				255								
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Glu	Glu	Asn	Ile	Ser	Ser	Tyr	Leu	Gln	Leu	Ile	Asp	Lys	Cys	Leu	Ile					
305				310				315				320								
His	Glu	Ala	Phe	Thr	Glu	Thr	Gln	Lys	Lys	Arg	Leu	Leu	Ser	Trp	Lys					
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Gln	Gln	Val	Gln	Lys	Leu	Phe	Arg	Ser	Phe	Pro	Arg	Lys	Thr	Leu	Leu					
				340				345				350								
Asp	Ile	Ser	Gly	Tyr	Arg	Gln	Gln	Arg	Asn	Arg	Gly	Phe	Gly	Gln	Ser					
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Asn	Ser	Leu	Pro	Thr	Ala	Gly	Ser	Val	Gly	Gly	Gly	Met	Gly	Arg	Arg					
				370				375				380								
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Thr	Thr	Ala	Thr	Pro	Thr	Ile	Met	Lys	Gln	Gly	Arg	Gln	Asn	Leu	Trp					
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Phe	Ala	Asn	Pro	Gly	Gly	Ser	Asn	Ser	Met	Pro	Ser	Arg	Thr	His	Ser					
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Ser	Val	Gln	Arg	Thr	Arg	Ser	Leu	Pro	Val	His	Thr	Ser	Pro	Gln	Asn					
				450				455				460								
Met	Leu	Met	Phe	Gln	Gln	Pro	Glu	Phe	Gln	Leu	Pro	Val	Thr	Glu	Pro					
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<210> 2723

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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&lt;210&gt; 2724

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2724

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Thr	Ile	His	Met	Phe	Gly	Asp	His	Thr	Asn	Arg	Val	Lys	Arg	Ile	Ala
			20					25					30		
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
			35				40					45			
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
	50					55					60				
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

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          100          105          110
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
          115          120          125
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
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His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
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Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
          165          170          175
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
          180          185          190
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
          195          200          205
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
          210          215          220
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
225          230          235          240
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          245          250          255
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
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Leu Tyr Gly Asn Arg Ala Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly
          290          295          300
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
305          310          315          320
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
          325          330          335
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
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Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
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Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys
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Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys
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&lt;210&gt; 2725

&lt;211&gt; 856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2725

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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

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		20					25				30				
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35				40					45				
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
	50				55					60					
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75					80	
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Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105					110			
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
	115					120						125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
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 <212> DNA  
 <213> Homo sapiens

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Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr Ala Ala
   65                70                75                80
Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly
   85                90                95
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala
   100                105                110
Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu
   115                120                125
Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro
   130                135                140
Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp
   145                150                155                160
Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu
   165                170                175
Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe
   180                185                190
Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg Ala Ile
   195                200                205
Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val
   210                215                220

```

&lt;210&gt; 2729

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2729

```

nnggtggcac ggatcgtagg agccaaatgt ttgttttccct tcttatccct tcgagaccaa
60
atgcagcccc agcagtgggtg aggcactact ttcttgaaga gttgtgcatc catgtaggtc
120
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccacctcc
180
agttcctctt cctcttccat actaagggcc tggcttgacc agtgtgcaga agacttcgga
240
gagccccctc acttccccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300
ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
360
gaaactgaca atgggcttcc caacacgata tcc
393

```

&lt;210&gt; 2730

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2730

```

Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```



```

1           5           10           15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
                20                25                30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
                35                40                45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
                50                55                60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
65                70                75                80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
                85                90

```

&lt;210&gt; 2731

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2731

```

nccgctccga cctgaaagca cgtccacctc tgcggctcct acctgggtgc aatcgagtta
60
aatggctgat aagcagatca gcctgccagc caagctcatc aatggcggca tcgcgggctg
120
atcggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctaacttcg gcatgtaccg gggagctgct gtgaacttga ccctcgtcac ccccgagaag
300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
ctgaccctgc ttaaagagat gctggcgggc tgtggggctg gcacctgcca ggtgatcgtg
420
accacgcca tggagatgct gaagatc
447

```

&lt;210&gt; 2732

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2732

```

Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
1           5           10           15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
                20                25                30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
                35                40                45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
50                55                60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
65                70                75                80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
                85                90                95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

```

	100		105		110
Gln	Val	Ile	Val	Thr	Thr
			Pro	Met	Glu
				Met	Leu
				Lys	Ile
	115		120		125

<210> 2733  
 <211> 3619  
 <212> DNA  
 <213> Homo sapiens

<400> 2733  
 gaattctgccc gcaagttccg cgtgagtgcc tggtccttcc acccccatgg ggcgagactg  
 60  
 tcgggcatgg gtatgggggtg ccagaggggct ctggccacct ggggcttgct gtctgagag  
 120  
 ccccgagcacc catgtcacc ccaacagctg gactgcccgc tggccatgga gcggatcaag  
 180  
 gaggaccggc ccatcaccat caaggacgac aaggggcaacc tcaaccgctg catcgagac  
 240  
 gtgggtctcg tcttcacac gggtcatggac aagctgcgcc tggcggagct gacgggtggac  
 300  
 gagttcctag cttcgggctt tgactccgag tccgaatccg agtccgaaaa ttctccacaa  
 360  
 gcggagacac ggggaagcacg cgaggctgcc cggagtcggg ataagccggg cgggagcccc  
 420  
 tcggccagcc ggcgtaaagg ccgtgcctct gagcacaaa accagctctc tcggctgaag  
 480  
 gacagagacc ccgagttcta caagttcctg caggagaatg accagagcct gctaaacttc  
 540  
 agcgactcgg acagctctga ggaggaagag gggccgttcc actccctgcc agatgtgctg  
 600  
 gaggaagcca gtgaggagga ggatggagcg gaggaaggag aagatgggga cagagtcccc  
 660  
 agagggctga aggggaagaa gaattctgtt cctgtgaccg tcgccatggg tgagagatgg  
 720  
 aagcaggcag caaagcaacg cctcactcca aagctgttcc atgaagtggg acaggcgctc  
 780  
 cgagcagctg tggccaccac ccgaggggac caggaaagtg ctgaggccaa caaattccag  
 840  
 gtcacggaca gtgctgcatt caatgctctg gttaccttct gcatcagaga cctcattggc  
 900  
 tgtctccaga agctgctgtt tggaaagggt gcaaaggata gcagcaggat gctgcagccc  
 960  
 tccagcagcc cgctctgggg gaagcttcgt gtggacatca aggtttacct gggctcggcc  
 1020  
 atacagctgg tgtcctgtct gtcggagacg acggtgttgg cggccgtgct gcggcacatc  
 1080  
 agcgtgctgg tgccctgctt cctgaccttc cccaagcagt gccgcatgct gctcaagaga  
 1140  
 atggtggctg tatggagcac tggggaggag tctctgcggg tgctggcttt cctggtcctc  
 1200  
 agcagagtct gccggcacia gaaggacact ttccttggcc ccgtcctcaa gcaaatgtac  
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 1320

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1380  
ttcctctaca tccgccagct cgccatacac ctgcgcaacg ccatgaccac ccgcaagaag  
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1500  
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1680  
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1740  
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1800  
taccgggacg gcctgggtgga gcagctgtac gacctaccc tggagtacct gcacagccag  
1860  
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1920  
ctccgggagt gcaaggtggc caactactgc cggcaggtgc agcagctgct tgggaagggt  
1980  
caggagaact cggcatacat ctgcagccgc cgccagaggg ttcccttcgg cgtctctgag  
2040  
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2100  
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2280  
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2460  
gcccctgggg agctgcagca gctggcccag gggccggagg acgagctgga ggatctgcag  
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2700  
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2760  
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2940

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 3240  
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 3360  
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 3480  
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 3540  
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 3600  
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 3619

&lt;210&gt; 2734

&lt;211&gt; 790

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2734

Met	Glu	Arg	Ile	Lys	Glu	Asp	Arg	Pro	Ile	Thr	Ile	Lys	Asp	Asp	Lys
1				5					10					15	
Gly	Asn	Leu	Asn	Arg	Cys	Ile	Ala	Asp	Val	Val	Ser	Leu	Phe	Ile	Thr
			20					25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
		35					40					45			
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
		50				55					60				
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65					70				75					80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
				85				90					95		
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100				105					110			
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
		115				120					125				
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
		130				135					140				
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145					150				155					160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
				165				170						175	
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

1975

610		615		620
Glu Gln Gln Ala Val	Glu Ala Trp Glu Lys Leu	Thr Arg Glu Glu Gly		
625	630	635	640	
Thr Pro Leu Thr Leu	Tyr Tyr Ser His Trp Arg Lys	Leu Arg Asp Arg		
	645	650	655	
Glu Ile Gln Leu Glu	Ile Ser Gly Lys Glu Arg Val	Arg Leu Gly Glu		
	660	665	670	
Gly Thr Trp Leu Glu	Asp Leu Asn Phe Pro Glu Ile	Lys Arg Arg Lys		
	675	680	685	
Met Ala Asp Arg Lys	Asp Glu Asp Arg Lys Gln Phe	Lys Asp Leu Phe		
	690	695	700	
Asp Leu Asn Ser Ser	Glu Glu Asp Asp Thr Glu Gly Phe	Leu Glu Arg		
705	710	715	720	
Gly Ile Leu Gly Pro	Leu Ser Thr Arg His Gly Val	Glu Asp Asp Glu		
	725	730	735	
Glu Asp Glu Glu Glu	Gly Glu Glu Asp Ser Ser Asn	Ser Glu Gly Glu		
	740	745	750	
Trp Ser Trp Asp Gly	Asp Pro Asp Ala Glu Ala Gly	Leu Ala Pro Gly		
	755	760	765	
Glu Leu Gln Gln Leu	Ala Gln Gly Pro Glu Asp Glu	Leu Glu Asp Leu		
	770	775	780	
Gln Leu Ser Glu Asp	Asp			
785	790			

&lt;210&gt; 2735

&lt;211&gt; 1666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2735

```

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ccgcagttcc cggccccgct ggccccagtc atggcgaagc agtacgatgt gctgttccgg
120
ctgctgctga tcggggactc cgggggtgggc aagacctgcc tgctgtgccg cttcacccgac
180
aacgagttcc actcctcgca catctccacc atcgggtgttg actttaagat gaagaccata
240
gaggtagacg gcatcaaagt gcgatacag atctgggaca ctgcagggca ggagagatac
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360
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420
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480
gtgggaagag agcaagggca gcagaaatgt ccttctcttc agctggcgaa ggagtatggc
540
atggacttct atgaaacaag tgctgcacc aacctcaaca ttaaagagtc attcacgcgt
600
ctgacagagc tggtgctgca ggcccatagg aaggagctgg aaggcctccg gatgcgtgcc
660
agcaatgagt tggcactggc agagctggag gaggaggagg gcaaaccgga gggccagcg
720

```

aactcttcga aaacctgctg gtgctgagtc ctgtgtgggg caccacacac gacacccctc  
780  
ttccctcagg aggcccgagg gcagacaggg gagccggggc tttgccctgc tgctgtcctc  
840  
tcgtgtgatg accctattga gtatcagtag ccactactcc cctgcctgg ccctgagagc  
900  
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960  
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1080  
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1380  
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1666

&lt;210&gt; 2736

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2736

Met	Ala	Lys	Gln	Tyr	Asp	Val	Leu	Phe	Arg	Leu	Leu	Leu	Ile	Gly	Asp
1				5					10					15	
Ser	Gly	Val	Gly	Lys	Thr	Cys	Leu	Leu	Cys	Arg	Phe	Thr	Asp	Asn	Glu
			20						25				30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
			35					40				45			
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
			50				55				60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65					70					75				80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
				85					90					95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
			100					105					110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

115	120	125
Arg Gln Val Gly Arg Glu Gln Gly Gln Gln Lys Cys Pro Ser Leu Gln		
130	135	140
Leu Ala Lys Glu Tyr Gly Met Asp Phe Tyr Glu Thr Ser Ala Cys Thr		
145	150	155
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
180	185	190
Glu Leu Ala Leu Ala Glu Leu Glu Glu Glu Gly Lys Pro Glu Gly		
195	200	205
Pro Ala Asn Ser Ser Lys Thr Cys Trp Cys		
210	215	

&lt;210&gt; 2737

&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2737

```

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120
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180
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240
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360
gacaccatcc gcaactggcct ggtgggcatg cttactcacc tggatgacct ccagctgatt
420
cagaaggagc aagagatttt cgagaggacc gaagaagcag agggcatttt ggatccccag
480
gagtcggaaa tggttaaactt taatgagaag tgcactcgga gccactact gacccaactc
540
tgggcaacgg cggttcttgg gtctctctca ggcacagagg acatacggat cgatgagagg
600
acagtcagcc ccttctgca attgtcagat gatcgaaaga cctgacctc agcaccaaga
660
agtcaaaggt gtgcagatgg cccggagcgc ttcgaccact ggcccaatgc cctggctgcc
720
acctccttc agaatgggct ccatgcctgg atgggtgaatg tocagaacag ttgtgcctat
780
aagggtggcg tggcttcagg ccacctgccc cgcaagggtt ctggcagtga ctgccgtctg
840
ggccacaatg ccttctcctg ggtctctctc cgtatgatc aggagtttcg tttctcac
898

```

&lt;210&gt; 2738

&lt;211&gt; 299

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

```

Xaa Pro Val Cys Ala Thr Cys Ala Gly Phe Gly Gly Arg Cys His Arg
 1           5           10           15
His Arg Ile Arg Arg Ala Glu Glu His Ala Glu Glu Leu Arg Asn Lys
      20           25           30
Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr
      35           40           45
Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
      50           55           60
Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
      65           70           75           80
Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
      85           90           95
Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
      100          105          110
Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
      115          120          125
Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
      130          135          140
Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
      145          150          155          160
Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
      165          170          175
Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
      180          185          190
Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
      195          200          205
Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
      210          215          220
Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
      225          230          235          240
Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
      245          250          255
Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
      260          265          270
Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
      275          280          285
Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser
      290          295

```

&lt;210&gt; 2739

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

```

gagagccgcc gagagtgggg ggcgatggcg aagctccggg tggcttacga gtacacggaa
60
gccgaggaca agagcatccg gctcggcttg tttctcatca tctcggcgt cgtgtcgtc
120
ttcatcttcg gcttctgctg gctgagtccc gcgctgcagg atctgcaagc cacggaggcc
180

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aattgcacgg tgctgtcggg gcagcagatc ggcgagggtg tcgagtgcac cttcacctgt  
240  
ggcgccgact gcagggggcac ctgcgagtac ccctgcgtcc aggtctacgt gaacaactct  
300  
gagtccaact ctagggcgct gctgcacagc gacgagcacc agctcctgac caaccccaag  
360  
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1501

&lt;210&gt; 2740

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

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Glu Tyr Thr	Glu Ala Glu Asp Lys	Ser Ile Arg Leu Gly Leu Phe Leu	
	20	25	30
Ile Ile Ser	Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu		
	35	40	45
Ser Pro Ala	Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val		
	50	55	60
Leu Ser Val	Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys		
65	70	75	80
Gly Ala Asp	Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr		
	85	90	95
Val Asn Asn	Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu		
	100	105	110
His Gln Leu	Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys		
	115	120	125
Arg Glu Asn	Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr		
	130	135	140
Trp Lys Asp	Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln		
145	150	155	160
His Gln Arg	Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile		
	165	170	175
Val Leu Leu	His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly		
	180	185	190
Val Leu Ile	Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys		
	195	200	205
Ala Glu Ala	Met Lys Lys Arg Lys Phe Ser		
	210	215	

&lt;210&gt; 2741

&lt;211&gt; 1487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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Tyr	Arg	Asp	Asp	Leu	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Phe	Gly	Gln	Lys
				20				25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
				35			40					45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
				50			55				60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
65					70					75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
				85				90						95	
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
				100				105					110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile	
				115			120				125				
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

130	135	140
Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp		
145	150	155
Pro Trp Tyr		160

&lt;210&gt; 2743

&lt;211&gt; 384

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2743

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384

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&lt;210&gt; 2744

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2744

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Gly	Ala	Ser	Gln	Asp	Ser	Gly	Val	Gln	Ser	Pro	Pro	Gly	Ala	Ser	Arg
			20					25					30		
Asp	Trp	Ser	Val	Pro	Ser	Pro	Pro	Thr	Ala	Ser	Gln	Asp	Ser	Gly	Val
		35					40					45			
Gln	Ser	Pro	Pro	Gly	Ala	Ser	Arg	Asp	Trp	Ser	Val	Pro	Ser	Pro	Pro
		50				55					60				
Arg	Ala	Tyr	Gln	Asp											
65															

&lt;210&gt; 2745

&lt;211&gt; 769

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2745

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120

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 240  
 tcttgagggg tccgagcctc aggccaagga cccctgatgc agactctgga atccctggcc  
 300  
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 ataccacagc caagaggggc ctttctcacc tggagagaaa cttccagacc agccctcac  
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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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Lys	Leu	Pro	Asp	Gln	Pro	Ser	His	His	Thr	Gln	Lys	Arg	Pro	Phe	Pro
			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
		35					40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
	50					55				60					
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70					75				80	
Pro	Ser	His	His	Ser	Gln	Glu	Gly	Pro	Phe	Pro	Pro	Gly	Glu	Lys	Leu
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Pro Asp

<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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 120

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aatacccatg cagctccaaa
1100

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&lt;210&gt; 2748

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2748

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Phe Phe Phe Ser Arg Pro Arg Ala Pro Ala Ser Ala Gln Pro Arg Trp
 1             5             10             15
Glu Pro Arg Pro Ala Pro Arg Thr Ala Pro Arg Lys Pro Glu Ser Pro
      20             25             30
Trp Thr Gly Ala Phe Trp Ile Pro Arg Pro Pro Ala Gly Ser Pro Lys
      35             40             45
Gly Cys Phe Ala Cys Val Ser Lys Pro Pro Ala Leu Gln Ala Pro Ala
      50             55             60
Ala Pro Ala Pro Glu Pro Ser Ala Ser Pro Pro Met Ala Pro Thr Leu
65             70             75             80
Phe Pro Met Glu Ser Lys Ser Ser Lys Thr Asp Ser Val Arg Ala Ala
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Gly Ala Pro Pro Ala Cys Lys His Leu Ala Glu Lys Lys Thr Met Thr

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1020

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<210> 2750

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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Thr	Ala	Gly	Tyr	Asp	His	Thr	Val	Arg	Phe	Trp	Gln	Ala	His	Ser	Gly
		20						25				30			
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35				40					45				
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
	50					55				60					
Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65				70					75					80	
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

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<210> 2751
<211> 1877
<212> DNA
<213> Homo sapiens
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1988

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1877

&lt;210&gt; 2752

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

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 Thr Pro Ala His Ala Pro Thr Xaa Pro Glu Thr Ala Arg Ser Ala Arg  
 20 25 30  
 Thr Ala Pro Arg Ser Ala Ile Thr Arg Arg Ala Phe Thr Ser Thr Arg  
 35 40 45  
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser  
 50 55 60  
 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly  
 65 70 75 80  
 Arg Ser Ser Thr Ile Ile Thr  
 85

&lt;210&gt; 2753

&lt;211&gt; 2561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

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&lt;210&gt; 2754

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2754

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      35           40           45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
      50           55           60
Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
65           70           75           80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
      85           90           95
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
      100          105          110
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
      115          120          125
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
      130          135          140
Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
145          150          155          160
Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
      165          170          175
Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
      180          185          190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
      195          200          205
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
      210          215          220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
      245          250          255
Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile
      260          265          270
Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln
      275          280          285
His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
      290          295          300
Leu Ile Ile Asp Gly His Thr Leu Lys Tyr Ala Leu Ser Phe Glu Val
305          310          315          320
Arg Arg Ser Phe Leu Asp Leu Ala Leu Ser Cys Lys Ala Val Ile Cys
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Cys Arg Val Ser Pro Leu Gln Lys Ser Glu Ile Val Asp Val Val Lys
      340          345          350
Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp
      355          360          365
Val Gly Met Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn
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Glu Gly Met Gln Ala Thr Asn Asn Ser Asp Tyr Ala Ile Ala Gln Phe

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Tyr	Ile	Ile	Glu	Leu	Trp	Phe	Ala	Phe	Val	Asn	Gly	Phe	Ser	Gly	Gln
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Glu	Ser	Met	Leu	Arg	Phe	Pro	Gln	Leu	Tyr	Lys	Ile	Thr	Gln	Asn	Gly
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Glu	Gly	Phe	Asn	Thr	Lys	Val	Phe	Trp	Gly	His	Cys	Ile	Asn	Ala	Leu
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Val	His	Ser	Leu	Ile	Leu	Phe	Trp	Phe	Pro	Met	Lys	Ala	Leu	Glu	His
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Asn	Ile	Val	Tyr	Thr	Tyr	Val	Val	Val	Thr	Val	Cys	Leu	Lys	Ala	Gly
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Leu	Glu	Thr	Thr	Ala	Trp	Thr	Lys	Phe	Ser	His	Leu	Ala	Val	Trp	Gly
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Ser	Met	Leu	Thr	Trp	Leu	Val	Phe	Phe	Gly	Ile	Tyr	Ser	Thr	Ile	Trp
			580					585					590		
Pro	Thr	Ile	Pro	Ile	Ala	Pro	Asp	Met	Arg	Gly	Gln	Ala	Thr	Met	Val
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Leu	Ser	Ser	Ala	His	Phe	Trp	Leu	Gly	Leu	Phe	Leu	Val	Pro	Thr	Ala
	610					615					620				
Cys	Leu	Ile	Glu	Asp	Val	Ala	Trp	Arg	Ala	Ala	Lys	His	Thr	Cys	Lys
625					630					635					640
Lys	Thr	Leu	Leu	Glu	Glu	Val	Gln	Glu	Leu	Glu	Thr	Lys	Ser	Arg	Val
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Leu	Gly	Lys	Ala	Val	Leu	Arg	Asp	Ser	Asn	Gly	Lys	Arg	Leu	Asn	Glu
		660					665						670		
Arg	Asp	Arg	Leu	Ile	Lys	Arg	Leu	Gly	Arg	Lys	Thr	Pro	Pro	Thr	Leu
		675					680					685			
Phe	Arg	Gly	Ser	Ser	Leu	Gln	Gln	Gly	Val	Pro	His	Gly	Tyr	Ala	Phe
	690					695					700				
Ser	Gln	Glu	Glu	His	Gly	Ala	Val	Ser	Gln	Glu	Glu	Val	Ile	Arg	Ala
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Tyr	Asp	Thr	Thr	Lys	Lys	Lys	Ser	Arg	Lys	Lys					
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&lt;210&gt; 2755

&lt;211&gt; 4795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

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&lt;210&gt; 2756

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2756

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      20           25           30
Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
      35           40           45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
      50           55           60
Ser Ser Thr Asp Leu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
      65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
      85           90           95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
      100          105          110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
      115          120          125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
      130          135          140
Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
      145          150          155          160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
      165          170          175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
      180          185          190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
      195          200          205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
      210          215          220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
      225          230          235          240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
      245          250          255
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
      260          265          270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
      275          280          285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
      290          295          300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
      305          310          315          320
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
      325          330          335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
      340          345          350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
      355          360          365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
      370          375          380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
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Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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465                470                475                480
Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
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Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
                500                505                510
Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
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Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
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Arg Thr Ile Ser Glu Ile
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&lt;210&gt; 2757

&lt;211&gt; 449

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2757

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300
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449

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&lt;210&gt; 2758

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2758

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Met Leu Ala Met Asp Thr Cys Lys His Val Gly Gln Leu Gln Leu Ala
  1                5                10                15
Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys
                20                25                30
Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
                35                40                45
Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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50                      55                      60  
 Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr  
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<210> 2759  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

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<210> 2760  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 2760  
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 20                      25                      30  
 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg  
 35                      40                      45  
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro  
 50                      55                      60  
 Ala Ala Pro Glu Thr Ser Ala Pro Val Asn Ser Gly Asp Pro Thr Thr  
 65                      70                      75                      80  
 Thr Ile Leu Glu

<210> 2761  
 <211> 922  
 <212> DNA  
 <213> Homo sapiens

<400> 2761  
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 180  
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 780  
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<210> 2762  
 <211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 2762  
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 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu  
 35 40 45  
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

50                      55                      60  
 Asn Ser Ser Thr Glu Ala Asn Val Ile Lys Glu Ala Leu Asp Ser Ser  
 65                      70                      75                      80  
 Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn  
                     85                      90                      95  
 Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile  
                     100                      105                      110  
 Glu Asp Ile Leu Pro Ser Lys Glu Glu Lys Ser Lys Thr Pro Pro Met  
                     115                      120                      125  
 Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr  
                     130                      135                      140  
 His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro  
 145                      150                      155                      160  
 Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr  
                     165                      170                      175  
 Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu  
                     180                      185                      190  
 Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn  
                     195                      200                      205  
 Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu  
                     210                      215                      220  
 Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp  
 225                      230                      235                      240  
 Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn  
                     245                      250                      255  
 Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly  
                     260                      265                      270  
 Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu  
                     275                      280                      285  
 Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu  
                     290                      295                      300  
 Val Ile Lys  
 305

&lt;210&gt; 2763

&lt;211&gt; 2210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2763

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 caaacagtcc agtctgcag accacacagg gtacatctag aggggtctac ttgcatcacc  
 180  
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 240  
 tgaatggcag gctgccaac aaccccaatc ccaaaccaac ctcccaggcc atgggcccac  
 300  
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 360  
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gaaatcctcc tggattcaat gacaacacat caatggccgg gcacagggtt ggattccttt  
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caaacttctg gtacagtagc atagcggggc tgcttgctga gacgtgaagg gttacgtcct  
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1260  
gcagacactc agacaggcca atgccaggcc aaaaaaactc ctgacacatg gagttgatcg  
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1920  
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1980  
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2040



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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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			20					25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
	50					55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
				85					90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
			100					105					110		
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
		115					120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
			130				135					140			
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
145					150					155				160	
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
			165					170						175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
			180					185				190			
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
		195					200					205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
		210				215					220				
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225					230					235				240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
			245					250						255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
			260				265					270			
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
		275					280					285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
		290				295				300					
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
          405          410          415
Phe Phe Leu Arg Leu Arg Arg
          420

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&lt;210&gt; 2765

&lt;211&gt; 582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2765

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480
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582

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&lt;210&gt; 2766

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2766

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Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
1          5          10          15
Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
          20          25          30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
          35          40          45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50		55		60	
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro				
65	70	75	80		
Ser Leu Ala Leu Cys Trp	Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro				
	85	90	95		
Glu Ala Gly Ser					
	100				

&lt;210&gt; 2767

&lt;211&gt; 1202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

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1200

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ag

1202

&lt;210&gt; 2768

&lt;211&gt; 282

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2768

```

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Glu Val Ser Pro Glu Pro Ile Val Ser Thr Val Ala Arg Leu Lys Ser
          20          25          30
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
          35          40          45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
          50          55          60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65          70          75          80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
          85          90          95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
          100         105         110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
          115         120         125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
          130         135         140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145          150          155          160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
          165         170         175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
          180         185         190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
          195         200         205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
          210         215         220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225          230          235          240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
          245         250         255
Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
          260         265         270
Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
          275         280

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&lt;210&gt; 2769

&lt;211&gt; 1286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2769

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<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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<212> DNA

<213> Homo sapiens

<400> 2771

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&lt;210&gt; 2772

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2772

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145      150      155      160
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      165      170      175
Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val Leu Cys Phe Leu
      180      185      190
Gln Asp Lys Lys Met Phe Lys Ser Val Val Lys Phe Gly Pro Trp Lys
      195      200      205
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&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2773

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&lt;210&gt; 2774

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



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&lt;211&gt; 3139

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2775

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&lt;210&gt; 2778

&lt;211&gt; 1146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

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Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp
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Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys
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Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser
      100          105          110
Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp
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Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe
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Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser
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<212> PRT

<213> Homo sapiens

<400> 2780

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1020

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<210> 2782

<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

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Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
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Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
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Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
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Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
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Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
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Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg
	275					280						285			
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&lt;210&gt; 2784

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
		20					25					30			
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
		35					40				45				
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50				55					60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
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<210> 2785
<211> 492
<212> DNA
<213> Homo sapiens
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<210> 2786  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu  
 50 55 60  
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala  
 65 70 75 80  
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile  
 85 90 95  
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val  
 100 105 110  
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly  
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<210> 2787  
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<210> 2788  
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<213> Homo sapiens

<400> 2788

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           20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
           35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
           50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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           20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
           35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50		55		60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala				
65		70		75
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg				80
	85		90	95
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys				
	100		105	110
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly				
	115		120	125
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg				
130		135		140

&lt;210&gt; 2791

&lt;211&gt; 1271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2791

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1080

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<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

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			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35					40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys	
	50					55				60					
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln	
65					70				75					80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
				85					90					95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
			100					105					110		
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
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<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 300  
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<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

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			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
		35					40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
	50					55					60				
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65				70						75				80	
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
			85						90					95	
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
			100					105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115				120						125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
	130					135									

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 1020  
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 1022

<210> 2796

<211> 56

<212> PRT

<213> Homo sapiens

<400> 2796

Ala	Ser	Ala	Ala	Cys	Pro	Ser	Arg	Ser	Cys	Trp	Leu	Arg	Ser	Ser	Cys
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Pro	Lys	Val	Ala	Glu	Glu	Gly	Val	Ser	Ser	Met	Ser	Pro	Gly	Ala	Ser
			20					25					30		
Gly	Glu	Glu	Ala	Glu	Val	Leu	Glu	Pro	Arg	Gly	Ser	Ser	Ser	Gly	Cys
			35				40					45			
Ser	Ala	Pro	Leu	Gly	Ala	Val	Val								
		50				55									

<210> 2797

<211> 475

<212> DNA

<213> Homo sapiens

<400> 2797

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 120

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 180  
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 240  
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 cacacgggct ggcaggccgc cctggtgtcc accatcatca tggtgcccg gggcctcatc  
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<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
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Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20					25					30			
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35				40					45				
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50				55					60					
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70				75						80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
		100					105					110			
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120					125				
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130				135					140					
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
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<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 tcatgggtca tgtctccttt tttattctgc tgcattgatg ttggagggtg cgaagacacc  
 240

ttcatggcca gcccgtagaa gctgagatc tccagggagc aggccatcgc gctcctcaag  
 300  
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 420  
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 720  
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 780  
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 840  
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 900  
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 1200  
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 1440  
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 1560  
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 2700  
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 2760  
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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40						45			
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50					55					60				
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70						75				80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
				85						90				95	
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<210> 2801
<211> 549
<212> DNA
<213> Homo sapiens
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<210> 2802

<211> 151  
 <212> PRT  
 <213> Homo sapiens

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 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys  
 35 40 45  
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr  
 50 55 60  
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn  
 65 70 75 80  
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp  
 85 90 95  
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile  
 100 105 110  
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe  
 115 120 125  
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu  
 130 135 140  
 Lys Arg Lys Gly Val Glu Phe  
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<210> 2803  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

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 ccgccagccg tagggtgtgt gctgtccggg ctcacgggga cctgtctcct gagtcgttcg  
 180  
 tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccggggc tgcagcacct  
 240  
 accgcaatat gccagccgcc atgccggaac ggagggagct gtgtccagcc tggccgctgc  
 300  
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 360  
 ggaagaagtg cagaggctgc agtccagggt ggacctgctg gaggagaagc tgcagctggg  
 420  
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 459

<210> 2804  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2804

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Gly Arg His Arg Trp Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
      20           25           30
Val Arg Gly Met Thr Asp Ser Pro Pro Ala Val Gly Cys Val Leu
      35           40           45
Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
      50           55           60
Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
65           70           75           80
Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
      85           90           95
Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
      100          105          110
Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
      115          120          125
Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
      130          135          140
Ala Gln Pro Gly Leu Ala Gly Thr Gly
145           150

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&lt;210&gt; 2805

&lt;211&gt; 771

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

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120
gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
180
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240
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360
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420
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480
gataatgtgc accatccaag tttatttgtg gcattttatg actaccaagc ataccagag
540
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771

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<210> 2806  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2806  
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 Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu  
 20 25 30  
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala  
 35 40 45  
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys  
 50 55 60  
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg  
 65 70 75 80  
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly  
 85 90 95  
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr  
 100 105 110  
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg  
 115 120 125  
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro  
 130 135 140  
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr  
 145 150 155 160  
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln  
 165 170 175  
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<210> 2807  
 <211> 1660  
 <212> DNA  
 <213> Homo sapiens

<400> 2807  
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 480

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 780  
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<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25				30			
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
			35				40					45			
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50		55		60	
Thr	Asp	Ser	Leu	Val	Ser
65		70		75	
Cys	Glu	Pro	Leu	Val	Ala
		85		90	
Ala	Met	Arg	Arg	Cys	Val
		100		105	
Cys	Glu	Phe	Pro	Pro	His
		115		120	
Pro	Pro	Ser	Leu	Gly	Leu
		130		135	
Leu	Glu	Lys	Arg	Val	Ser
		145		150	
Ser	Ser	Thr	Tyr	Val	Gln
		165		170	
Ser	Val	Pro	Leu	Pro	His
		180		185	
Gln	Ser	Pro	Phe	Gln	Ala
		195		200	
Ser	Leu	Gln	Leu	Phe	Trp
		210		215	
Gln	Gly	Lys	Cys	Thr	Arg
		225		230	
Ile	Ser	Gln	Ala	Ile	Ile
		245		250	
Ala	Val	Val	Thr	Cys	Arg
		260		265	
Cys	Pro	Arg	Glu	Trp	Ala
		275		280	
Arg	Val	Val	Leu	Gln	Phe
		290		295	
Ala	Arg	Val	Asp	Glu	Pro
		305		310	
Ser	Pro	Ser	Val	Leu	Arg
		325		330	
Lys	Pro	Ser	Lys	Ile	Val
		340		345	
Gln	Cys	Gly	Glu	Leu	Pro
		355		360	
Leu	Ser	Cys	Leu	Ser	Ile
		370		375	
Ile	Leu	Ala	Ser	Ser	Cys
		385		390	

&lt;210&gt; 2809

&lt;211&gt; 1502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

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180  
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420  
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480  
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780  
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840  
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900  
gcagacaaaa aaaagaacta agtataaaat gtataaatat ttttgacttg aacatttgga  
960  
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1080  
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1320  
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1380  
acaacaaaaa ggatgtgatc attaattgta aagcgctttg taaaattcac atttacaaaa  
1440  
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1500  
aa  
1502

&lt;210&gt; 2810

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg  
 1 5 10 15  
 Val Cys Val Cys Ala Arg Leu Cys Val Cys Val Cys Ala Ser Val Cys  
 20 25 30  
 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys  
 35 40 45  
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys  
 50 55 60  
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys  
 65 70 75 80  
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly  
 85 90 95  
 Phe Gly Thr Arg Trp Phe  
 100

&lt;210&gt; 2811

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2811

nnacgcgtgt aggttggttg cacttacaag taagtataaa ctgctcttca attcaagttt  
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 attaatgctg cccaccccca gggttttaat ccggtctggg cagaagcggg cgataaaagc  
 120  
 caaaggagac cataaagtgt aggatatttc ctgggttagtg gctgccgggt aatcacgatg  
 180  
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 240  
 ggcaaaagcc ccgagcccag cctgcccngt tgccccgctc ccgcggtgga tgaacctcaa  
 300  
 cccnnttccc aggtcctctc tggccccagg gtcccaggac ccccgagacc ctgggggtgcg  
 360  
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 420  
 ccgggagcga cggaaatgcc tcctccacgc cccaaggttc ctgctccgcc aggcccaacc  
 480  
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 540  
 gggccttctc tcagtgggca actggggagc tagcccgggg cggccgcaag c  
 591

&lt;210&gt; 2812

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2812

Met His Pro Ser Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln  
 1 5 10 15  
 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys  
 20 25 30  
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35	40	45
Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu		
50	55	60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro		
65	70	75
Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala		80
	85	90
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His		95
	100	105
Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln		110
	115	120
Leu Gly Ser		125
130		

&lt;210&gt; 2813

&lt;211&gt; 2417

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2813

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tgcttgagtt tgaagagagt taaccactgg aatctctcat gttgtttatt ccctccaaaa
120
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180
tttgtaagt ttgtctttaa ttttccacag gctttcttga tcatggatgg tgaagatata
240
ccagattttt caagttttaa ggaggaaact gcttattgga aggaactttc cttgaagtat
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900
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1020

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1140  
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2340  
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2400  
aaaaaaaaaa aaaaaaa  
2417

&lt;210&gt; 2814

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2814

```

Phe Val Lys Phe Val Phe Asn Ile Ser Gln Ala Phe Leu Ile Met Asp
 1          5          10          15
Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu Thr Ala Tyr
          20          25          30
Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
          35          40          45
Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
          50          55          60
Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
65          70          75          80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
          85          90          95
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
          100          105          110
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
          115          120          125
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
          130          135          140
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
145          150          155          160
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
          165          170          175
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
          180          185          190
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
          195          200          205
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
          210          215          220
Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
225          230          235          240
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
          245          250          255
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
          260          265          270
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
          275          280          285
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
          290          295          300
Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
305          310          315          320
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
          325          330          335
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
          340          345          350
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
          355          360          365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
          370          375          380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
385          390          395          400
Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
          405          410          415
Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

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	420		425		430										
Val	Ser	His	Asp	Cys	Thr	Phe	Val	Gly	Arg	Lys	Val	Ile	His	Thr	Cys
	435						440					445			
Ile	Thr	Trp	Ser	Leu	Asp	Ala	Glu	Val	Pro	Ile	His	His	Thr	Cys	Pro
	450					455					460				
Ile	Ala	Pro	Thr	Leu	Leu	Tyr									
465					470										

&lt;210&gt; 2815

&lt;211&gt; 1421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2815

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120
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180
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240
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720
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840
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1080
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1200

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 1320  
 acccatggca cagggcaggc agcccggagg ctgggtgggg cctcagtggg ggctgctgcc  
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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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Val	Gly	Gly	Thr	Glu	His	Ala	Tyr	Arg	Pro	Gly	Arg	Arg	Val	Cys	Ala
			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55					60				
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
	65				70					75				80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
			85						90					95	
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
			100					105					110		
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
		115						120				125			
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130					135				140					
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
	145				150					155				160	
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
			165						170					175	
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180						185					190		
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
		195					200					205			
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210					215					220				
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
	225				230					235				240	
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245						250					255	
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260						265					270		
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275						280					285			
Ala	Ala	Pro	Met	Pro	Leu	Pro	Asn	Met	Leu	Gly	Val	Gln	Lys	Pro	Pro
	290					295					300				
Arg	Gly	Asp													

305

&lt;210&gt; 2817

&lt;211&gt; 219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2817

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nntggctttt ctgtctctct ctcttttttt cttgtagatc acgagctgct caggcaagag
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120
gttctgctgc gggcggaggt ccatcagcac cagcacacac accagcacac gcaccaacac
180
acacaccagc accaacacac attcgcccc ttcacgcgt
219

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&lt;210&gt; 2818

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2818

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Xaa Gly Phe Ser Val Ser Leu Ser Phe Phe Leu Val Asp His Glu Leu
1           5           10          15
Leu Arg Gln Glu Leu Asn Thr Arg Phe Leu Val Gln Ser Ala Glu Arg
20          25          30
Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
35          40          45
Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
50          55          60
Gln His Thr Phe Ala Pro Phe Thr Arg
65          70

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&lt;210&gt; 2819

&lt;211&gt; 730

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2819

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420

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 720  
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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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	20						25				30				
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
	35					40					45				
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
	50					55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70				75					80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85					90						95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
		100					105						110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
	115					120						125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
145					150					155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165					170						175	
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
			180					185					190		
Thr	Glu	Pro													
		195													

<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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120  
tgtgtactcc tcgccatggc acaactccaa acacgtttct acactgataa caagaaatat  
180  
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ctcatcaagg gccagtttct tcgaatgcc ttggacaaac acatggaaat ggaagacatc  
360  
tcatcagaag aagttgtgga aatagaatac gtggagaagt atactgcacc ccagccagag  
420  
caatgcatgt tccatgatga ctggatcagt tcaattaaag gggcagagga atggatcttg  
480  
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660  
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agaaagaaac agaagacaga acagttggga ctaacaagga ctcccatagt gaccctctct  
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960  
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1140  
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1740

cctagg

1746

<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His
		35					40					45			
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50					55					60				
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65					70					75					80
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln
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Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
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Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
	115						120					125			
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
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Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Xaa	Glu
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Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu
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Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser
			180					185					190		
Val	Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly
	195						200					205			
Ser	Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu
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Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly
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His	Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile
			260					265					270		
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser
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Ser	Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg
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His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser
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Leu	Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser

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          340          345          350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
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Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
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&lt;210&gt; 2823

&lt;211&gt; 461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2823

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461

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&lt;210&gt; 2824

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2824

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Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr
          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825  
 <211> 1520  
 <212> DNA  
 <213> Homo sapiens

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 180  
 gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca  
 240  
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 420  
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 1080  
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 1380  
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<210> 2826

<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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			20					25					30		
Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
		35					40					45			
Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
	50				55					60					
Glu	Ser	Pro	Leu	Thr	Leu	Ala	Ala	Cys	Gly	Gly	His	Val	Glu	Leu	Ala
65					70				75					80	
Ala	Leu	Leu	Ile	Glu	Arg	Gly	Ala	Asn	Leu	Glu	Glu	Val	Asn	Asp	Glu
			85					90					95		
Gly	Tyr	Thr	Pro	Leu	Met	Glu	Ala	Ala	Arg	Glu	Gly	His	Glu	Glu	Met
			100					105					110		
Val	Ala	Leu	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln
		115					120					125			
Lys	Lys	Leu	Lys	Lys	Leu	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe
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Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
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Gly	Cys	Ser	Thr	Pro	Leu	Met	Glu	Ala	Ala	Gln	Glu	Gly	His	Leu	Glu
				165				170						175	
Leu	Val	Lys	Tyr	Leu	Leu	Ala	Ala	Gly	Ala	Asn	Val	His	Ala	Thr	Thr
			180					185					190		
Ala	Thr	Gly	Asp	Thr	Ala	Leu	Thr	Tyr	Ala	Cys	Glu	Asn	Gly	His	Thr
		195					200					205			
Asp	Val	Ala	Asp	Val	Leu	Leu	Gln	Ala	Gly	Ala	Asp	Leu	Asp	Lys	Gln
	210				215					220					
Glu	Asp	Met	Lys	Thr	Ile	Leu	Glu	Gly	Ile	Asp	Pro	Ala	Lys	His	Leu
225					230					235				240	
Glu	His	Glu	Ser	Glu	Gly	Gly	Arg	Thr	Pro	Leu	Met	Lys	Ala	Ala	Arg
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Ala	Gly	His	Val	Cys	Thr	Val	Gln	Phe	Leu	Ile	Ser	Lys	Gly	Ala	Asn
			260					265					270		
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		275				280						285			
Cys	Ala	Gly	Gly	His	Leu	Ala	Val	Val	Glu	Leu	Leu	Leu	Ala	His	Gly
	290				295					300					
Ala	Asp	Pro	Thr	His	Arg	Leu	Lys	Asp	Gly	Ser	Thr	Met	Leu	Ile	Glu
305					310					315				320	
Ala	Ala	Lys	Gly	Gly	His	Thr	Ser	Val	Val	Cys	Tyr	Leu	Leu	Asp	Tyr
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<400> 2828  
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      35           40           45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu
      50           55           60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu
      65           70           75           80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr
      85           90           95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu
      100          105          110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu
      115          120          125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu
      130          135          140
Leu Leu Ser His Asn Cys Leu Ser Glu Leu Pro Glu Ala Leu Gly Ala
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&lt;210&gt; 2829

&lt;211&gt; 3648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2829

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<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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			20					25					30		
Lys	Gln	Gln	Asp	Leu	Ser	Ile	Ala	Met	Val	Val	Thr	Ser	Arg	Glu	Val
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			180					185					190		
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Lys	Gly	Tyr	Cys	Ala	Ala	Leu	Tyr	Glu	Gly	Leu	Arg	Cys	Cys	Pro	His
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Leu	Gly	Arg	Ala	Glu	Pro	Glu	Phe	Ala	Gly	Gly	Tyr	Glu	Arg	Arg	Glu
				245					250					255	
Arg	His	Ala	Lys	Thr	Ile	Asp	Ile	Ala	Gln	Glu	Glu	Val	Leu	Thr	Cys
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His	Asp	Glu	His	Gly	Asp	Ser	Cys	Val	His	His	Cys	Glu	Asp	Lys	
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Glu	Asp	Asp	Gly	Asp	Ser	Cys	Val	Glu	Cys	Trp	Ala	Asn	Ser	Glu	Glu
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&lt;210&gt; 2832

&lt;211&gt; 611

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2832

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Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser
      35           40           45
Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
      50           55           60
Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
      65           70           75           80
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
      85           90           95
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
      100          105          110
Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
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Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
      130          135          140
Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
      145          150          155          160
Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
      165          170          175
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
      180          185          190
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
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Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
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Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
      225          230          235          240
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      275          280          285
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      290          295          300
Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
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Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
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Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg		430
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Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile		445
	450	455
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val		460
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His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp		480
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Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val		495
	500	505
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp		510
	515	520
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys		525
	530	535
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr		540
545	550	555
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile		560
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Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu		575
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Pro Glu Met		605
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&lt;210&gt; 2833

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

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&lt;210&gt; 2834

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 <213> Homo sapiens

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 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu  
 35 40 45  
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser  
 50 55 60  
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr  
 65 70 75 80  
 Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu  
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 Leu Gly Met Cys Ala  
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<210> 2836

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2836

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			20					25					30		
Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
		35					40					45			
Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
	50					55					60				
Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
65					70					75					80
His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
			85						90					95	
Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
			100					105					110		
Glu	Glu	Asn	Arg	Asp	Lys	Leu	Asp	His	Cys	Leu	Gln	Glu	Ala	Ser	Pro
		115					120					125			
Arg	Tyr	Lys	Ser	Leu	Arg	Phe	Trp	Gly	Ser	Val	Gly	Pro	Ala	Glu	Ser
	130					135					140				
Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
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Gln	Arg	Pro	Pro	Arg	Pro	Ser	Leu	Trp	Asp	Leu	Ser	Gly	Trp	Gly	Val
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Leu Gly

<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

<400> 2837

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&lt;210&gt; 2838

&lt;211&gt; 370

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2838

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			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40					45				
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
	50				55					60					
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65				70					75					80	
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90						95	
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
		100				105						110			
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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      130              135              140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp
145              150              155              160
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
      165              170              175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
      180              185              190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
      195              200              205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
      210              215              220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
225              230              235              240
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
      245              250              255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
      260              265              270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
      275              280              285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
      290              295              300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
305              310              315              320
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
      325              330              335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
      340              345              350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
      355              360              365
Ser Phe
      370

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&lt;210&gt; 2839

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2839

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120
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360
aagctccaac tctacgggcc caccaacatt gccccatca tccagaaggt tgccaagtca
420

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 606

<210> 2840

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2840

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Ile	Met	Gly	Gly	Cys	Gln	Ile	Gln	Phe	Thr	Val	Ala	Ile	Asp	Phe	Ala
			20					25					30		
Ala	Thr	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu	His	Tyr	Ile	His
		35					40					45			
Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val	Ala	Val	Gly	Glu
	50				55						60				
Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro	Ala	Phe	Gly	Phe
65				70					75					80	
Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His	Asp	Phe	Ala	Ile
			85					90					95		
Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile	Gln	Gly	Val	Val
			100					105					110		
Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu	Tyr	Gly	Pro	Thr
	115						120					125			
Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser	Ala	Ser	Glu	Glu
	130					135					140				
Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu	Leu	Ile	Leu	Thr
145				150					155					160	
Asp	Gly	Val	Ile	Thr	Asp	Met	Gly	Asp	Thr	Arg	Glu	Ala	Ile	Val	His
			165					170					175		
Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly	Val	Gly	Asn	Ala
			180					185					190		
Asp	Phe	Ser	Asp	Met	Gln	Met	Leu	Asp	Gly						
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<210> 2841

<211> 2065

<212> DNA

<213> Homo sapiens

<400> 2841

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 180



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240
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300
cctggcatca ggatctcagg gtgccgggccc cttggagcag aaggcagcaa tgcagagtcc
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420
cagtgcgaagt cagagcctcc cctgctgctg acaagcaagc gtaccatcta caccgccggg
480
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660
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720
caccagatg cctttgactt cgacctcatc atttccaccc tcaagaagct gaagcagggg
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1680
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1740
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1800

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 1920  
 cgtccccacc accctcctcc tgcctcctga cccaggactg ctgaatacaa agatgttaat  
 1980  
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 2040  
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 2065

<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Ala	Leu	Gly	Ala	Glu	Gly	Ser	Asn	Ala	Glu	Ser	Leu	Asp	Arg	Leu	Leu
			20					25				30			
Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
		35					40				45				
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr
	50					55				60					
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
65					70			75						80	
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
				85				90					95		
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
			100					105				110			
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
		115					120				125				
Gln	Val	Leu	Thr	Glu	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe	
	130					135				140					
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
145					150				155					160	
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
				165				170						175	
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
			180					185				190			
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
	195						200				205				
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile
	210				215					220					
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp
225					230				235					240	
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
				245				250						255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
			260				265					270			
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val
		275					280					285			
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala

290	295	300
Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys		
305	310	315
Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu		
	325	330
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu		
	340	345
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val		
	355	360
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys		
	370	375
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro		
385	390	395
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile		
	405	410
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu		
	420	425
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val		
	435	440
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His		
	450	455
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu		
465	470	475
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile		
	485	490
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro		
	500	505
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro		
	515	520
Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly		
530	535	540

&lt;210&gt; 2843

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

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<210> 2844  
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<213> Homo sapiens

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20 25 30  
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35 40 45  
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu  
50 55 60  
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe  
65 70 75 80  
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro  
85 90 95  
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu  
100 105 110  
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly  
115 120 125  
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile  
130 135 140  
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala  
145 150 155 160  
Gln Ala Ser Thr Pro  
165

<210> 2845  
<211> 934  
<212> DNA  
<213> Homo sapiens

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240  
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300  
tgtgcagtca gtgtcgagt ccacctgcgt actggatgct gctctcagtg ctgcggtgcc  
360  
acagcacaca aaaatagttc tcacgttgcc gtggagagac aagcagtcaa cgcagatata  
420  
tcctgtggca agtcatggta aatgctgtgg caagaaagca ggttctggag gtgaagggcg  
480

gtgggggaga cagggcaggg aaggtgagca gcggtctgag agtcccttgt ggcacctcgt  
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 780  
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 934

<210> 2846  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 2846  
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 Cys His Lys Gly Leu Ser Asp Arg Cys Ser Pro Ser Leu Pro Cys Leu  
 35 40 45  
 Pro His Arg Pro Ser Pro Pro Glu Pro Ala Phe Leu Pro Gln His Leu  
 50 55 60  
 Pro Ser Leu Ala Thr Gly Tyr Ile Cys Val Asp Cys Leu Ser Leu His  
 65 70 75 80  
 Gly Asn Val Arg Thr Ile Phe Val Cys Cys Gly Thr Ala Ala Leu Arg  
 85 90 95  
 Ala Ala Ser Ser Thr Gln Val Ala Leu Asp Thr Asp Cys Thr Gln Gly  
 100 105 110  
 Glu Leu Gly Leu Ile Thr Pro Leu Thr Arg Gly Glu Thr Leu Gln Leu  
 115 120 125  
 Glu Val Thr Phe Ile Pro Leu Gln Leu Arg Pro Phe His Ser Pro Arg  
 130 135 140  
 Thr His Arg Gly Ala  
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<210> 2847  
 <211> 2830  
 <212> DNA  
 <213> Homo sapiens

<400> 2847  
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cagctctcac atgaccacga atctgttggc cctcctagcc tggatgctca gccaactca  
180  
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240  
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420  
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720  
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840  
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 1920  
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 1980  
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 2040  
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 2100  
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 2580  
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 2640  
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 2700  
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 2760  
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 2820  
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 2830

&lt;210&gt; 2848

&lt;211&gt; 856

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2848

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			20					25					30		
Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
		35				40					45				
Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
	50					55				60					
Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

65					70					75				80	
Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
			100					105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
		115					120					125			
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
	130					135					140				
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
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<213> Homo sapiens

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			130			135						140			
His	Asn	Met	Ile	His	Arg	Asp	Val	Lys	Ala	Gly	Asn	Ile	Leu	Leu	Ser
145					150				155						160
Glu	Pro	Gly	Leu	Val	Lys	Leu	Gly	Asp	Phe	Gly	Ser	Ala	Ser	Ile	Met
				165				170						175	
Ala	Pro	Ala	Asn	Ser	Phe	Val	Gly	Thr	Pro	Tyr	Trp	Met	Ala	Pro	Glu
			180					185					190		
Val	Ile	Leu	Ala	Met	Asp	Glu	Gly	Gln	Tyr	Asp	Gly	Lys	Val	Asp	Val
		195					200					205			
Trp	Ser	Leu	Gly	Ile	Thr	Cys	Ile	Glu	Leu	Ala	Glu	Arg	Lys	Pro	Pro
					215						220				
Leu	Phe	Asn	Met	Asn	Ala	Met	Ser	Ala	Leu	Tyr	His	Ile	Ala	Gln	Asn
225					230					235					240
Glu	Ser	Pro	Val	Leu	Gln	Ser	Gly	His	Trp	Ser	Glu	Tyr	Phe	Arg	Asn



2091

675					680					685					
Glu	Leu	Glu	Leu	Arg	Gln	Leu	Gln	Ala	Val	Gln	Arg	Thr	Arg	Ala	Glu
690					695					700					
Leu	Thr	Arg	Leu	Gln	His	Gln	Thr	Glu	Leu	Gly	Asn	Gln	Leu	Glu	Tyr
705					710					715					720
Asn	Lys	Arg	Arg	Glu	Gln	Glu	Leu	Arg	Gln	Lys	His	Ala	Ala	Gln	Val
725					730					735					
Arg	Gln	Gln	Pro	Lys	Ser	Leu	Lys	Val	Arg	Ala	Gly	Gln	Arg	Pro	Pro
740					745					750					
Gly	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Ala	Leu	Gly	Pro	Pro	Asn	Thr	Gly
755					760					765					
Thr	Pro	Ile	Glu	Gln	Gln	Pro	Cys	Ser	Pro	Gly	Gln	Glu	Ala	Val	Leu
770					775					780					
Asp	Gln	Arg	Met	Leu	Gly	Glu	Glu	Glu	Glu	Ala	Val	Gly	Glu	Arg	Arg
785					790					795					800
Ile	Leu	Gly	Lys	Glu	Gly	Ala	Thr	Leu	Glu	Pro	Lys	Gln	Gln	Arg	Ile
805					810					815					
Leu	Gly	Glu	Glu	Ser	Gly	Ala	Pro	Ser	Pro	Ser	Pro	Gln	Lys	His	Gly
820					825					830					
Ser	Leu	Val	Asp	Glu	Glu	Val	Trp	Gly	Leu	Pro	Glu	Glu	Ile	Glu	Glu
835					840					845					
Leu	Arg	Val	Pro	Ser	Leu	Val	Pro	Gln	Glu	Arg	Ser	Ile	Val	Gly	Gln
850					855					860					
Glu	Glu	Ala	Gly	Thr	Trp	Ser	Leu	Trp	Gly	Lys	Glu	Asp	Glu	Ser	Leu
865					870					875					880
Leu	Asp	Glu	Glu	Phe	Glu	Leu	Gly	Trp	Val	Gln	Gly	Pro	Ala	Leu	Thr
885					890					895					
Pro	Val	Pro	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Ala	Pro	Ile	Gly
900					905					910					
Thr	Pro	Arg	Asp	Pro	Gly	Asp	Gly	Cys	Pro	Ser	Pro	Asp	Ile	Pro	Pro
915					920					925					
Glu	Pro	Pro	Pro	Thr	His	Leu	Arg	Pro	Cys	Pro	Ala	Ser	Gln	Leu	Pro
930					935					940					
Gly	Leu	Leu	Ser	His	Gly	Leu	Leu	Ala	Gly	Leu	Ser	Phe	Ala	Val	Gly
945					950					955					960
Ser	Ser	Ser	Gly	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu
965					970					975					
Leu	Ala	Ala	Gln	Gly	Gly	Gly	Gly	Leu	Gln	Ala	Ala	Leu	Leu	Ala	Leu
980					985					990					
Glu	Val	Gly	Leu	Val	Gly	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Leu	Cys	Thr
995					1000					1005					
Ala	Leu	His	Leu	Pro	Ser	Ser	Leu	Phe	Leu	Leu	Leu	Ala	Gln	Gly	Thr
1010					1015					1020					
Ala	Leu	Gly	Ala	Val	Leu	Gly	Leu	Ser	Trp	Arg	Arg	Gly	Leu	Met	Gly
1025					1030					1035					1040
Val	Pro	Leu	Gly	Leu	Gly	Ala	Ala	Trp	Leu	Leu	Ala	Trp	Pro	Gly	Leu
1045					1050					1055					
Ala	Leu	Pro	Leu	Val	Ala	Met	Ala	Ala	Gly	Gly	Arg	Trp	Val	Arg	Gln
1060					1065					1070					
Gln	Gly	Pro	Arg	Val	Arg	Arg	Gly	Ile	Ser	Arg	Leu	Trp	Leu	Arg	Val
1075					1080					1085					
Leu	Leu	Arg	Leu	Ser	Pro	Met	Ala	Phe	Arg	Ala	Leu	Gln	Gly	Cys	Gly
1090					1095					1100					
Ala	Val	Gly	Asp	Arg	Gly	Leu	Phe	Ala	Leu	Tyr	Pro	Lys	Thr	Asn	Lys

```

1105          1110          1115          1120
Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn
          1125          1130          1135
Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val
          1140          1145          1150
Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu
          1155          1160          1165
Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly
          1170          1175          1180
Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg
1185          1190          1195          1200
Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly
          1205          1210          1215
Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro
          1220          1225          1230
Pro Trp Arg
          1235

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&lt;210&gt; 2855

&lt;211&gt; 1676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2855

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acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtctcagag
240
agcagcgctt ctccgacgg ccccatcca gtcacacccc cgtcacgggc ctcagagagc
300
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360
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420
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480
acagaaatag aaacaacgac ttccagcatc cctggggcct cagacacaga tctcatcccc
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720
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780
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900

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 1020  
 cctcttccctt ctgtccctcc gactacaacc aacagcagcc gagggacgaa cagcacctta  
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 1200  
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 1620  
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 1676

&lt;210&gt; 2856

&lt;211&gt; 401

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2856

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Thr	Ser	Ala	Ala	Ser	Gly	Ser	Pro	Glu	Gly	Ala	Arg	Met	Thr	Thr	Val
			20					25					30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
		35					40					45			
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50					55					60				
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65					70					75				80	
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
			85					90						95	
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
			100					105						110	
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
		115						120				125			
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130					135					140				
Glu	Ala	Leu	Val	Thr	Val	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile	
145					150					155				160	
Thr	Glu	Ile	Glu	Thr	Thr	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Ser	Asp	Thr

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120
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180
ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccatacc
240
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300
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360
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420
attttgaata tgatgcagag gagttcttgg tctctttggc cttgctgata acagaaggac
480
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 540  
 cttgttacct agtaactacc aaacatgaat gtagtgacaa gctggcccag tgccgccaag  
 600  
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatgggtg  
 660  
 aaatgatgct actaccagac tgctgctaca gcgatgatgg gccaccaca gaggggaattg  
 720  
 atctaaatga tcctgcgatt aagcaagatg cattattatt agaaagatgg atcttggagc  
 780  
 cagttcctcg acagaatggg gaccgattta ttgaagagaa gacgcttctg ttggctgtcc  
 840  
 gctcatttgt gtttttttct cagttaagtg catggctgag tgtttctcat ggtgctattc  
 900  
 caggaatat tctctacaga atcagtgtg ctgatgtaga cctacagtgg aatttttcac  
 960  
 agactccaat tgagcatgtg tttcctgttc ccaatgtttc tcacaatgtt gccttgaaag  
 1020  
 tcagtggcca atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac  
 1080  
 actaatattg gcctttatga gaaaagaatt caacaacata aacttaaaac tcacagcac  
 1140  
 cataacccaa atgaagcaga acaatgtggg acaaacagtt cacagcgtct gtgtagcaaa  
 1200  
 caaacttgga ccatggcacc tgaaagtgtg ttacatgcaa aaagtggccc aagtccagaa  
 1260  
 tatactgcag ctgtcaaaaa tatcaaacta tatccaggca ctggcagtaa atctgaccat  
 1320  
 gggacatctc aagccaatat tctaggcttt agtggtatag gtgatataaa atcacaagaa  
 1380  
 acatcagtga gaactttaaa atcattttca atgggtgatt ccagtatctc taaccgccag  
 1440  
 agtttctggc agtcagctgg tgagactaac cctttaatag gctctttaat tcaggagcgg  
 1500  
 caagaaatca ttgcaagaat tgctcaacat ttgattcatt gtgatccaag cacttcacat  
 1560  
 gtttctggac gtccatttaa tactcaagag tctagttcac tccattcaaa acttttccgg  
 1620  
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<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

Met	Lys	Pro	Asp	Arg	Asp	Thr	Leu	Asp	Glu	Tyr	Phe	Glu	Tyr	Asp	Ala
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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35					40					45			
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

```

      50              55              60
Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu
65              70              75              80
Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro
      85              90              95
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu
      100             105             110
Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile
      115             120             125
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys
      130             135             140
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser
145             150             155             160
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr
      165             170             175
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr
      180             185             190
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala
      195             200             205
Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile
      210             215             220

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&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

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180
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240
cttcagcgcg cgcacctgc agcatcttct acgtcgggac cacagcctcc gcctccacaa
300
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420
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480
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540
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600
gagacacctg gggcagtctc tccaaccag cccaccttc ctcagcctca tttgcctcac
660
cttcacaaac agaattgtgt gatcaatggg aatgctcatc cacaccacct ccattaccac
720
catcagattc atcatgggca ccacctccaa catggtcacc accatccatc tcatgttgct
780

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 900  
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 1020  
 tttaattcc  
 1029

<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

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Thr	Met	His	Gln	Pro	Pro	Glu	Ser	Thr	Ala	Ala	Ala	Ala	Ala	Ala	Ala
			20					25					30		
Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35					40					45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50					55					60				
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
65					70					75					80
Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
				85					90					95	
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala
			100					105					110		
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe
	115					120						125			
Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
	130					135					140				
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
145					150					155					160
Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
			165						170					175	
Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
		180						185					190		
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
	195					200						205			
Asn	Gln	Pro	His	Leu	Pro	Gln	Pro	His	Leu	Pro	His	Leu	Pro	Gln	Gln
	210					215					220				
Asn	Val	Val	Ile	Asn	Gly	Asn	Ala	His	Pro	His	His	Leu	His	His	His
225					230					235					240
His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
			245						250					255	
Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
		260						265					270		
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
	275					280						285			
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala



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Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
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Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
      325              330              335
Ala Val Gly Ser Phe Asn Ser
      340

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&lt;210&gt; 2861

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2861

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120
aatgggaaca agggccctcc agttggctca aggataagca tgccaaccac aaagcctcgt
180
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240
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300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg ccttattgct
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660
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720
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756

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&lt;210&gt; 2862

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2862

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 1          5          10          15
Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
      20          25          30
Ser Glu Ala Leu Ala Val Ile Asn Gly Asn Lys Gly Pro Pro Val
      35          40          45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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50	55	60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro		
65	70	75
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala		80
	85	90
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr		95
	100	105
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys		110
	115	120
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln		125
	130	135
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser		140
145	150	155
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr		160
	165	170
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His		175
	180	185
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr		190
	195	200
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro		205
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Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu		220
225	230	235
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg		240
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&lt;210&gt; 2863

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

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<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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		35					40					45			
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Thr	Ala	Cys	Tyr	Cys	His	His	Lys	His	Leu	Cys	Cys	Ser	Ser	Ser	Tyr
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Ile	Pro	Gln	Ser	Arg	Leu	Arg	Tyr	Thr	Pro	His	Pro	Ala	Tyr	Ala	Thr
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Phe	Cys	Arg	Pro	Lys	Glu	Asn	Trp	Trp	Gln	Tyr	Thr	Gln	Gly	Arg	Arg
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Tyr	Ala	Ser	Thr	Pro	Gln	Lys	Phe	Tyr	Leu	Thr	Pro	Pro	Gln	Val	Asn
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		180						185					190		
Thr	Arg	Gly	Met	Leu	Leu	Gly	Val	Phe	Asp	Gly	His	Ala	Gly	Cys	Ala
		195					200					205			
Cys	Ser	Gln	Ala	Val	Ser	Glu	Arg	Leu	Phe	Tyr	Tyr	Ile	Ala	Val	Ser
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<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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240

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<210> 2866

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2866

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			20				25						30		
Ser	Asp	His	Gln	Ser	Arg	Cys	Asn	Gln	Gly	Cys	Val	Ser	Arg	Ser	Lys
		35					40					45			
Arg	Asp	Ile	Ser	Ser	Tyr	Lys	Trp	Lys	Thr	Asp	Ser	Ile	Ile	Gly	Pro
	50					55				60					
Ile	Arg	Leu	Lys	Arg	Asp	Arg	Ser	Ala	Ser	Gly	Asn	Ser	Gly	Phe	Gln
65				70						75				80	
His	Glu	Thr	His	Ala	Glu	Glu	Thr	Pro	Asn	Gln	Pro	Phe	Asn	Ser	Val
			85						90					95	
His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
			100					105					110		
Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
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Gln	Lys	Leu	Gln	Asn	Tyr										
			130												

<210> 2867

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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<210> 2868

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2868

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Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
			20					25					30		
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
			35				40					45			
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
			50			55					60				
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
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<210> 2869

<211> 5811

<212> DNA

<213> Homo sapiens

<400> 2869

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<210> 2870

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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<210> 2871

<211> 786

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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786

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&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

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Ile Ser Pro Asp Ala Phe Phe Gln Ile Asn Thr Ala Gly Ala Glu Met
      35             40             45
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Leu Leu Asp Ile Cys Cys Gly Thr Gly Val Ile Gly Leu Pro Leu Ala
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Gln His Thr Ser Arg Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val
      85             90             95
Glu Asp Ala Arg Trp Thr Ala Ala Phe Asn Gly Ile Thr Asn Ser Glu
      100            105            110
Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser
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 <212> DNA  
 <213> Homo sapiens

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 1080  
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<213> Homo sapiens

<400> 2874

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Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
      35           40           45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
      50           55           60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
      65           70           75           80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
      85           90           95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
      100          105          110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
      115          120          125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
      130          135          140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
      145          150          155          160
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
      165          170          175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
      180          185          190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
      195          200          205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
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<210> 2875

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<212> DNA

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<400> 2875

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<211> 193

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<213> Homo sapiens

<400> 2876

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Pro	Gly	Pro	Lys	Thr	Val	Thr	Leu	Lys	Arg	Thr	Ser	Gln	Gly	Phe	Gly
	50					55					60				
Phe	Thr	Leu	Arg	His	Phe	Ile	Val	Tyr	Pro	Pro	Glu	Ser	Ala	Ile	Gln
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		115					120					125			
Lys	Val	Asn	Gly	Glu	Ser	Val	Ile	Gly	Lys	Thr	Tyr	Ser	Gln	Val	Ile
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Ala	Leu	Ile	Gln	Asn	Ser	Asp	Thr	Thr	Leu	Glu	Leu	Ser	Val	Met	Pro
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Lys	Asp	Glu	Asp	Ile	Leu	Gln	Val	Val	Ser	Phe	Ile	Tyr	Ser	Tyr	Met
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<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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<212> PRT

<213> Homo sapiens

<400> 2878

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Thr	Glu	Glu	Gly	Lys	Glu	Val	Trp	Asp	Tyr	Val	Thr	Val	Arg	Lys	Asp
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Ser	Thr	Gly	Phe	Gly	Asn	Phe	Glu	Glu	Ile	Gly	Pro	Leu	Asp	Ser	Asp
				85					90					95	
Leu	Lys	Pro	Arg	Lys	Thr	Thr	Trp	Leu	Gln	Ala	Ala	Ser	Leu	Leu	Phe
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Val	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Tyr	Val	Asn	Gly	Ser	Gly
		115					120					125			
Ala	Tyr	Ala	Lys	Asp	Leu	Ala	Met	Val	Ala	Ser	Asp	Met	Met	Val	Leu
		130				135					140				
Leu	Lys	Thr	Phe	Phe	Ser	Cys	His	Lys	Glu	Phe	Gln	Thr	Val	Pro	Phe
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Gln	Ser	His	Leu	Val	Cys	Leu	Cys	Gln	Arg	His	Val	Arg	His	Leu	Gln
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Arg	Asp	Ala	Leu	Ser	Gln	Leu	Met	Asn	Gly	Pro	Ile	Arg	Lys	Lys	Leu
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                370                375                380
Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala
385                390                395                400
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser
                405                410                415
Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val
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&lt;210&gt; 2879

&lt;211&gt; 1352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

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<213> Homo sapiens

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Ala	Arg	Gly	Glu	Arg	Pro	Pro	Arg	Leu	Gly	Leu	Pro	Thr	Pro	Gly	Val
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Pro	Val	Xaa	Asp	Lys	Tyr	Ala	Pro	Lys	Leu	Asp	Ser	Pro	Tyr	Phe	Arg
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Gly	Ala	Val	His	Thr	Leu	Leu	Gln	Lys	Ala	Pro	Gly	Val	Ser	Asp	Pro
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Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val
			165					170						175	
Gln	Ile	Ala	Trp	Gln	Ile	Tyr	Arg	His	Gln	Gln	Lys	Ile	Lys	Glu	Met
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	210					215					220				
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<212> DNA
<213> Homo sapiens
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 <212> PRT  
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 35 40 45  
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 50 55 60  
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 <213> Homo sapiens

<400> 2883  
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 120  
 tacgggctgc ccacacctcc tgaaatgtct cccctggacg tgctggagcc ggagcagacc  
 180  
 ttcttctcct cccctgccca ggaggagcat ggccatcccc gccgcatccc ccacctgcca  
 240  
 gggcaccctg actcaccgga gtacgcccc agccctctcc actgtagcca cccctggggc  
 300

tccctggccc ttggccagtc ccccggcgtc tccatgatgt cccctgtacc cggctgtccc  
 360  
 ccatctcctg cctattactc cccggccacc taccaccac tccactccaa cctccaagcc  
 420  
 cacctgggcc agctttcccc gcctcctgag caccctggct tcgacgcctt ggatcaactg  
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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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Leu	Arg	Gly	Cys	Tyr	His	Glu	Gly	Pro	Ala	Gly	Gly	Ala	Ala	Ala	Ala
			20					25					30		
Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
		35					40					45			
Met	Ser	Pro	Leu	Asp	Val	Leu	Glu	Pro	Glu	Gln	Thr	Phe	Phe	Ser	Ser
	50					55					60				
Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
65					70				75					80	
Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
			85					90					95		
His	Pro	Leu	Gly	Ser	Leu	Ala	Leu	Gly	Gln	Ser	Pro	Gly	Val	Ser	Met
			100					105					110		
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
		115					120					125			
Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
	130					135					140				
Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
145					150					155				160	
Asn	Gln	Gly	Glu	Leu	Leu	Gly	Asp	Met	Asp	Arg	Asn				
			165					170							

<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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 120  
 aagcaaaaagg aaactataaa agcctttcta aagaaactag aagccctcat agcaagcaat  
 180  
 gacaatgcca ataaaacctg caagatgatg ttagccacag aagaaacctc tctgacctt  
 240  
 gttggaatca aaagggaactt ggaggcctta agcaaacaat gcaacaagtt actggaccga  
 300

gccaagcca gagaagagca ggttgaaggg acaattaagc gccttgaaga attttacagc  
 360  
 aaattgaaag aattttctat tctgctccag aaagccgaag aacatgaaga gtcacaaggt  
 420  
 cctgttggtg tggaaacgga gacaattaat cagcagctta acatgttcaa ggtattccag  
 480  
 aaagaagaga ttgaaccctt gcaaggtaaa cagcaagatg taaactgggt aggtcaaggc  
 540  
 cttattcaga gtgctgccaa aagcactagc actcagggct tggagcatga cctggatgat  
 600  
 gtcaatgcac ggtggaagac tctcaataag aaggtggctc agcgagcagc ccagctgcag  
 660  
 gaggccttgc tgcactgtgg gaggttccag gatgccctgg agtccctgct cagctggatg  
 720  
 gtggacactg aggagcttgt ggccaatcag aagccccgt cggctgagtt caaagtggta  
 780  
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 807

<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
		35					40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
	50					55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65					70					75					80
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
				85					90					95	
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
			100					105					110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
		115					120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
	130					135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145					150					155					160
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
				165					170					175	
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
			180					185						190	
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
		195					200						205		
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
	210					215						220			
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

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<210> 2887
<211> 1945
<212> DNA
<213> Homo sapiens
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2121

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 1380  
 ttagctggct caggggcttc tatgggatcc tggaagtcc ttagggactt gcccagggtc  
 1440  
 ccagggccac ccacattca tctgctccct cataggcccc acctccacgt cccggctggg  
 1500  
 cccagaccc cagcttcctg cctccaccg ggagtctgca tggttgggag tcttgggtgg  
 1560  
 aggggccttt gtgaggctgg acccggtca gggcaggtgg aggagctggg cctccacag  
 1620  
 ggtgccccgg cagtgccatc ctggtggggg agggcagcct tcaaactgtt ggggtctaca  
 1680  
 gtctcaggt ctaggcaggg ctgcccgttc tccacctccc catccgcccc agggccctg  
 1740  
 cctgtgctg ccttgacccc cctctgcttg ggccacggtg tctctgcatt gctgccttt  
 1800  
 ttgccttcac ctcttttctt ccccgcccc tgcacattcg gggctctcag cccaggtg  
 1860  
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 1920  
 aaaaaaaaaa aaaaaaaaaa aaaaa  
 1945

<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

Met	Met	Lys	Pro	Ser	Trp	Leu	Ser	Arg	Thr	Glu	Phe	Ser	Lys	Arg	Leu
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Leu	Cys	Arg	Thr	Leu	Trp	Cys	Gln	Ser	Gly	Trp	Ser	Ser	Arg	Ser	Tyr
		20					25						30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg	
		35				40					45				
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
		50				55					60				
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70					75				80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
			85						90					95	
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
		100						105					110		
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
		115					120					125			
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
		130				135						140			
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145					150					155				160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
			165						170					175	
Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln



180						185						190					
Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp		
195						200						205					
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser		
210						215						220					
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly		
225	230					235					240						
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys		
245						250						255					
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser		
260						265						270					
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr		
275						280						285					
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu		
290						295						300					
Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys							
305						310						315					

<210> 2889

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2889

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180     cgggaggtgc  agctaaaggc  caccaaggca  gaacaggcag  aagggatgga  atttggttc
240     aagatgceca  agatgaccat  gcccgaagcta  gggagggcag  agtccccatc  acgtggcaag
300     ccaggcgagg  cgggtgctga  ggtctcaggg  aagctggtaa  cacttccttg  tctgcagcca
360     gaggtggatg  gtgaggctca  tgtgggtgtc  ccctctctca  ctctgccttc  agtggagcta
420     gacctgccag  gagcacttgg  cctgcagggg  caggtcccag  ccgctaaaat  gggcaagggg
480     gagcggggcg  agggccccga  ggtggcagca  ggggtcaggg  aagtgggctt  ccgagtgcc
540     tctgttgaaa  ttgtcacccc  acagctgccc  gccgtggaaa  ttgaggaagg  gcggtctggag
600     atgatagaga  caaaagtcaa  gccctcttcc  aagttctcct  tacctaagtt  tggactctcg
614     ggaccaaagg  tggc

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<210> 2890

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2890

Val His Leu Pro Glu Val Gln Leu Pro Lys Val Ser Glu Ile Arg Leu

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      20           25           30
Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
      35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
      50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
      65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
      85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
      100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
      115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
      130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
      145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
      165          170          175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
      180          185          190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
      195          200

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&lt;210&gt; 2891

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2891

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120
ccaaccaacc aacaaaacta aaagtgtatac tgacacagtt caggtgataa gcaggaaaat
180
gggattatca gacaccggct ctttggcaca cactgcgaag tcagcccctc tgcccagtct
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300
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360
tttgctcagg gctcggcaca gacgtcctcc ggccttccac tgcgatgttg ctctttggtc
420
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&lt;210&gt; 2892

<211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2892  
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                   20                  25                  30  
 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg  
                   35                  40                  45  
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser  
   50                  55                  60  
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val  
 65                  70                  75                  80  
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr  
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<210> 2893  
 <211> 2270  
 <212> DNA  
 <213> Homo sapiens

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 120  
 tcaattctgg cctgtgctct tctagggaga ctagatgtat gcaccacca gaaactgcca  
 180  
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 240  
 gcacccgaca ggcagagttt attccctcag cttgggggtg gcagtgggtg tggtagtgct  
 300  
 aggggttact gcaggcaggt ttctgtttct ttgcatcccg ggactggctt gttctcacct  
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 720  
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 840  
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960  
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1140  
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1200  
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2100  
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2270

<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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			20					25					30
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser
		35					40					45	
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys
		50				55					60		
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys
65					70					75			80
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser
				85					90				95
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro
			100					105					110
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu
		115					120					125	
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala
	130					135					140		
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser
145					150					155			160
Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg
				165					170				175
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly
			180					185				190	
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile
		195					200				205		
Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu
	210					215				220			
Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg
225					230				235				240
Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg
			245						250				255
Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp
		260						265				270	
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile
		275					280					285	
Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val
	290					295				300			
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly
305					310					315			320
Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly
			325						330				335
Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro
			340					345				350	
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser
		355					360				365		
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly
	370					375					380		
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala
385					390					395			400
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser
			405						410				415
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp
			420					425				430	
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu

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          435              440              445
Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
          450              455              460
Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg
465              470              475              480
Thr Leu Leu Gln Gln Leu Asp Asp His Gln
          485              490

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&lt;210&gt; 2895

&lt;211&gt; 697

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2895

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697

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&lt;210&gt; 2896

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2896

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Met Pro Pro Tyr Trp Pro Leu Ala Asn Phe Ser Ser Ile Cys Ser Arg
1          5          10          15
His Met Pro Cys Pro Gly Cys Cys Gly Lys Ala Arg Pro Pro Arg Pro
          20          25          30
Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala
          35          40          45
Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu
          50          55          60
Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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65					70					75					80
Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Pro	Ser
				85					90					95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
			100					105					110		
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg	Arg
		115					120					125			
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
	130					135					140				
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
145					150					155				160	
Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
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&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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1020

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20				25					30			
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
	35					40					45				
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55				60					
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65				70				75						80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
	115						120					125			
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
	130					135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145				150				155						160	
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180				185					190			
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
	195					200					205				
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
225	230	235
Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr Leu	Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys Leu	Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu Glu	Val Phe Met Glu Cys
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu Ser	Gly Cys Cys Gln Ala
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile Pro	Phe Gly Pro Val Val
340	345	350
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu Met	Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys Lys	Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr Ser	Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val Gly	Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly Ser	Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala Val	Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr Gln	Thr Ile Leu Leu Ser
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His Pro	Ile Phe Glu Gly Glu
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu Glu	Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg Thr	Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro Leu	Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu Leu	Pro Lys Ala Val Ala
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr Pro	Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln Arg	Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu Ser	Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser Lys	Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Ser His Lys	Glu Gly Thr Tyr Ala Ala	Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr Tyr	Asn Val Ser Phe Arg
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile Glu	Met Val Thr Pro Val

[illegible]

<210> 2899

&lt;211&gt; 876

&lt;212&gt; DNA

<213> Homo sapiens

<400> 2899

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 gagctgcact gccgaatgtc gtagccacta gccacatagg ctgttgattg cttgaaatgt  
 180  
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 300

gaagaagaaa tgactgtggt ggaggaagcg gatgatgaca aaaaaaggct gctgcagatt  
 360  
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 aagaaaatga tcctcacatt tgaaaagaga tcatataaaa accaagaatt gcggattaag  
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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

Met	Thr	Val	Val	Glu	Glu	Ala	Asp	Asp	Asp	Lys	Lys	Arg	Leu	Leu	Gln
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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
			20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg	Ser
			35				40					45			
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu	Lys
			50			55					60				
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met	His
65					70					75					80
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu	Asn
				85					90					95	
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp	Val
			100					105					110		
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp	Thr
			115				120					125			
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu	Val
						135					140				
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu	Asp
145					150					155					160
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala	Ile
				165					170					175	
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr			
			180						185						

<210> 2901

<211> 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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 120  
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 180  
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&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
		50				55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90						95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120						125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu  
 145                      150                      155

<210> 2903

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2903

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 120  
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 180  
 aagccctact acgagggtgcg gctggcttct gtgcttggtc cagagccttc cctggactct  
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<210> 2904

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2904

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 20                      25                      30  
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
 35                      40                      45  
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
 50                      55                      60  
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
 65                      70                      75                      80  
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
 85                      90                      95  
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
 100                      105                      110  
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
 115                      120                      125  
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130	135	140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg		
145	150	155
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala		160
	165	170
Pro Pro Ser Arg		175
	180	

&lt;210&gt; 2905

&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2905

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&lt;210&gt; 2906

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2906

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1 5 10 15
Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala
20 25 30
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

35 40 45  
 Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr  
 50 55 60  
 Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu  
 65 70 75 80  
 Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser  
 85 90 95  
 Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile  
 100 105 110  
 Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val  
 115 120 125  
 Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys  
 130 135 140  
 Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala  
 145 150 155 160  
 Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala  
 165 170 175  
 Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu  
 180 185 190  
 Leu Leu Asp Val Lys Gly Pro Leu  
 195 200

&lt;210&gt; 2907

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2907

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 120  
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 180  
 caaaggcaaa ggaattcttc ccttaatgtt ggacggctct gagactgctc caccctgggc  
 240  
 tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag  
 300  
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 360  
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 379

&lt;210&gt; 2908

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2908

Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu  
 1 5 10 15  
 Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr  
 20 25 30  
 Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys



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<210> 2909
<211> 2420
<212> DNA
<213> Homo sapiens
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2139

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 aatagtgaga gagaaaatcc caaacatttg agacaggggt caaaagcacc cagacgcctt  
 1260  
 ctgtctcttt ccagttccc atctggctag ggactgtgaa tcagaattca gaatctgtgc  
 1320  
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 1380  
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 1920  
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 2160  
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 2280  
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 2340  
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 2400  
 aatatgtaga aaaatagcca  
 2420

&lt;210&gt; 2910

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

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Pro Cys Thr Thr Ser Asn Ala Gly Val Trp Leu Leu Leu Leu His Arg
      20             25             30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35             40             45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50             55             60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
65      70             75             80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
      85             90             95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
      100            105            110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
      115            120            125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu
      130            135            140
Cys Leu Gly Leu Ile Gly Arg Leu Val
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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240
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300
cagttactga aactagaaac caatgaattc caacaacttc aaagtaaaat cagtttaatt
360
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420
gtcatcttaa agcgtctaca ggaagaaatt aatgaggtaa aaacttggtc caataggata
480
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540
gtagacaaaa gtacaacttc catggcaaaa gatgttggtc tcaagattac aagtgtaaaa
600
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660
caagaactag aaaataaaat agagaaagta gaaaaaata cagtaaaaaa tataggtgat
720
cttctttcaa gcagtattga tcgaacagca acgctccgaa agacagcatc tgaaaattca
780
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840

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acagatagat ttctaagctt agaaggtgac agagccaaag ttctgaagac agtgactttt  
 900  
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 960  
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 1020  
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 1080  
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 1140  
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 1200  
 aatgatattt tggagcaaaa gtcattttat atttaatcct attttgtaca gtaaaaaata  
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 1320  
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 1327

<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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Ala	Ala	Glu	Pro	Gly	Lys	Arg	Ser	Glu	Gly	Gly	Lys	Thr	Pro	Val	Ala
			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
			35				40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
			50			55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65				70					75					80	
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85					90					95		
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
			115				120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
			130			135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150				155					160	
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170						175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180				185						190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
			195			200					205				
Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
210				215							220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

225					230					235				240	
Ser	Val	Lys	Lys	Thr	Leu	Thr	Glu	Leu	Lys	Ser	Asp	Phe	Asp	Lys	His
				245					250					255	
Thr	Asp	Arg	Phe	Leu	Ser	Leu	Glu	Gly	Asp	Arg	Ala	Lys	Val	Leu	Lys
			260					265						270	
Thr	Val	Thr	Phe	Ala	Asn	Asp	Leu	Lys	Pro	Lys	Val	Tyr	Asn	Leu	Lys
		275					280						285		
Lys	Asp	Phe	Ser	Arg	Leu	Glu	Pro	Leu	Val	Asn	Asp	Leu	Thr	Leu	Arg
	290					295					300				
Ile	Gly	Arg	Leu	Val	Thr	Asp	Leu	Leu	Gln	Arg	Glu	Lys	Glu	Ile	Ala
305					310					315					320
Phe	Leu	Ser	Glu	Lys	Ile	Ser	Asn	Leu	Thr	Ile	Val	Gln	Ala	Glu	Ile
				325					330					335	
Lys	Asp	Ile	Lys	Asp	Glu	Ile	Ala	His	Ile	Ser	Asp	Met	Asn		
			340					345					350		

&lt;210&gt; 2913

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2913

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120
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240
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360
g
361

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&lt;210&gt; 2914

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2914

Met	Ala	Gly	Gly	Ser	Ser	Gly	Ser	Ser	Ser	Glu	Lys	Met	Ala	Arg	Tyr
1				5					10					15	
Trp	Val	Met	Ile	Ser	Lys	Arg	Trp	Thr	Arg	Glu	Ala	Leu	Asp	Gly	Phe
			20					25					30		
Cys	Asn	Met	Glu	Ile	Gly	Ile	Ile	Ile	Arg	Asn	Gly	Ser	Gln	Asp	Gly
		35				40						45			
Pro	Glu	Pro	Ser	Ile	Ser	Gly	Leu	Lys	Lys	Leu	His	Pro	Gln	Leu	Ser
	50					55					60				
Leu	Ser	Glu	Asp	Val	His	Ala	Pro	Gln	Val	Ala	Asn	Asp	Thr	Glu	Ala
65					70				75						80
Gly	Arg	Lys	Leu	Asp	Val	Gly	Pro	Gln	Leu	Leu	Asp	Gln	Leu	Ala	Gln

	85		90		95										
His	Gln	Leu	His	Gly	Leu	Ala	His	Phe	Val	His	Asp	Ala	Leu	Asp	Asp
	100						105						110		

<210> 2915  
 <211> 1782  
 <212> DNA  
 <213> Homo sapiens

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 120  
 tcagctgccg atagagaaat atacttactt agaacttccc ttcacgcaga aagagaacaa  
 180  
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 240  
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 300  
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 360  
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 420  
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 720  
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 1080  
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 1320

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<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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Lys	Met	Glu	Arg	Gln	Lys	Arg	Gln	Gln	Gln	Ala	Ala	Gln	Ile	Arg	Leu
			20					25					30		
Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr
		35					40					45			
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu
		50				55					60				
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu
65					70					75				80	
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys
			85						90				95		
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr
			100					105					110		
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn
		115					120					125			
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val
	130					135					140				
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His
145					150					155				160	
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile
			165						170					175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu
		180					185					190			
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile
	195					200						205			
Asn	Thr	Leu	Glu	Ile	Leu	Ile	Glu	Asp	Asp	Lys	Gln	Lys	Ser	Ile	Gln
210					215						220				
Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala
225				230						235				240	
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp
			245					250					255		
Gly	His	Glu	Leu	Ala	Gln	Gln	Gly	Ser	Ser	Leu	Ala	Gln	Asn	Arg	Gly

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Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys
                290                295                300
Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
305                310                315                320
Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
                325                330                335
Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
                340                345                350
Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
                355                360                365
Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg
                370                375                380
Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
385                390                395                400
Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
                405                410                415
Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
                420                425                430
Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
                435                440                445
Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
                450                455                460
Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
465                470                475                480
His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys
                485                490                495
Asn Lys Lys Thr Met Glu Ala Lys Ile Lys Gln Leu Ala Phe Ala Leu
                500                505                510
Asn Glu Ile Gln Gln Asp Met
                515

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&lt;210&gt; 2917

&lt;211&gt; 2636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2917

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
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Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
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Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
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Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
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Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
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Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
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	245	250
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu		255
	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
	290	295
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln		300
305	310	315
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys		320
	325	330
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser		335
	340	345
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe		350
	355	360
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		365
	370	375
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		380
385	390	395
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala		400
	405	410
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		415
	420	425
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser		430
	435	440
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr		445
	450	455
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		460
465	470	475
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg		480
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Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		495
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&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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		20						25					30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
		35					40					45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50					55					60				
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65					70					75				80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
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			100					105					110		
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<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
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Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His		60	
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Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
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Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
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Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
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Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
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Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
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Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
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Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
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Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
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 <212> DNA  
 <213> Homo sapiens

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<210> 2924  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

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 20                                      25                                      30  
 Arg Arg Asn Ser Val Tyr Cys Gly Gly Glu Leu Gly Gly Ala Gln Pro  
 35                                      40                                      45  
 Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala  
 50                                      55                                      60  
 Gly Thr Gly Ser Pro Gly Trp Gln Arg Ser Leu Gln Pro Ala Leu Gly  
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 <212> DNA  
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<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
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Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
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Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu	Pro
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Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu	Phe
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<210> 2928  
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 <212> PRT  
 <213> Homo sapiens

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 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val  
 50 55 60  
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys  
 65 70 75 80  
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu  
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 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys  
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 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser  
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 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe  
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 <213> Homo sapiens

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Ser	Met	Glu	Glu	Lys	Gln	Glu	Thr	Lys	Ser	Thr	Asp	Gly	Gln	Glu	Pro
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<211> 625
<212> DNA
<213> Homo sapiens
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2163

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<210> 2933

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2933

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 120  
 cgagaaagtc aagaaacgac tagagaactt ctgaaagtta aagacagatt aattgaagta  
 180  
 gaaagaaata atgctacact gcaagcagag aagcaagcgt tgaaaactca actgaagcaa  
 240

cttgagacac agaacaataa tttgcaggct cagattcttg cacttcagag gcagacagtg  
 300  
 tcattacaag aacagaatac cactcttcaa acacagaatg ccaagcttca ggttgaaaat  
 360  
 tccaccctta attcccaaag tacctcactc atgaaccaga atgcccaact cctaattccag  
 420  
 cagtcttctt tagaaaaatga aaatgaatct gtaatcaaag agcgagaaga cctaaaatct  
 480  
 ctctatgatt ctctgatcaa agatcatgaa aagctggaac ttcttcatga acgtcaggct  
 540  
 tcagagtatg aatctcttat ctctaaacat ggaactctga agtctgcca caaaaatctt  
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 660  
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 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
			35				40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
			50			55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70				75					80	
Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
			85					90					95		
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100					105					110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
			115				120				125				
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
			130			135					140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155				160	
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
				165					170					175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180					185					190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
			195			200						205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
		210				215					220				
Glu	Lys	Met	Leu	Lys											
225															

<210> 2935  
<211> 1200  
<212> DNA  
<213> Homo sapiens

<400> 2935  
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120  
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgctttaggc  
180  
tgtgcccctct gattcttctg gtgtactcat gatactctcc cttgggtgcc tccaggctga  
240  
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt  
300  
taaagctggg agaggttttg tcatggtgac aggggacctg aaggcccagc tcctcttccc  
360  
tcttgccaat acagggacaa gttaaagaag aagaagaaag taaaggtaaa gatggaaaag  
420  
aaatccacgc cctctagggg ctcatcatcc aagtcgtcct caaggcagct aagcgagagc  
480  
ttcaagagca aagagtttgt gtctagtgat gagagctctt cgggagagaa caagagcaaa  
540  
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagtac tccccccagc  
600  
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaaggttct ctttgcgttt  
660  
gccttctcac accccccgga agtcagcagg gaaacgcaga gaactcctat gaaccaccaa  
720  
aaggctgtaa atgatgaaac atgcaaagct agccacataa catcaagtgt ctttccttca  
780  
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840  
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900  
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960  
gtgaaacctg gaaataccaa ggaaaaaatt gcattctttg catcccacca gtgtagtaac  
1020  
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1080  
aggaaaaaat caggggatct taaaaaagcc aaggtaacagg tggaaaggat gagggaggtt  
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1200

<210> 2936  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2936  
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Pro	Leu	Pro	Ser	Cys	Gln	Tyr	Arg	Asp	Lys	Leu	Lys	Lys	Lys	Lys	Lys
		20					25					30			
Val	Lys	Val	Lys	Met	Glu	Lys	Lys	Ser	Thr	Pro	Ser	Arg	Gly	Ser	Ser
		35					40					45			
Ser	Lys	Ser	Ser	Ser	Arg	Gln	Leu	Ser	Glu	Ser	Phe	Lys	Ser	Lys	Glu
		50				55					60				
Phe	Val	Ser	Ser	Asp	Glu	Ser	Ser	Ser	Gly	Glu	Asn	Lys	Ser	Lys	Lys
65					70					75				80	
Lys	Arg	Arg	Arg	Ser	Glu	Asp	Ser	Glu	Glu	Glu	Leu	Ala	Ser	Thr	
			85					90					95		
Pro	Pro	Ser	Ser	Glu	Asp	Ser	Ala	Ser	Gly	Ser	Asp	Glu			
		100						105							

&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacgggtggct
180
gccccggtgg tggaccccca ggtgccttca ccacagtcca aggatgcca gtacacagtg
240
accttctccc actgtaagga ctatgtggtg aatgtaacag aagaatttct ggagttcatt
300
tcagatggag cactggccat tgaagtatgg ggccaccggt gtgctggaaa tggcagctcc
360
atctgggagg tcgattctct tcatgctaag acaagaacac tgcattgacag gtggaatgaa
420
gtaacgcgaa gaatagaaat gtggatctcc atattagaat tgaatgagtt aggagagtat
480
gtgagcagtg aacttcatca ggcaaaagat gtcaacacag gaggcattct tcaacttaga
540
cagggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcattc agggacactg
600
ccacttatgg ttgaagccat cctgtcagta tccatcggct gtgtaactgc caggtccacc
660
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720
agttatcagg aagaagactt aaactgcag
749

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&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

Xaa Asn Ser Ser Glu Ser Gly Ser Leu Glu Val Val Asp Ser Ser Gly

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Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys
      20             25             30
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln
      35             40             45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val
      50             55             60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val
      65             70             75             80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe
      85             90             95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His
      100            105            110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His
      115            120            125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg
      130            135            140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr
      145            150            155            160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile
      165            170            175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys
      180            185            190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu
      195            200            205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg
      210            215            220
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp
      225            230            235            240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys
      245

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&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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120
ccactgcate cagccaatag gagcccagcc accatggcgg agctgcagga ggtgcagatc
180
acagaggaga agccactgtt gccaggacag acgcctgagg cggccaagac tcactctgtg
240
gagacaccat acggctctgt cactttcact gtctatggca cccccaaacc caaacgcccc
300
gcgaccccta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgttt
360
cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccctt
420
ggaatggaag agggagcccc tgtgttcctt ttgggatatc agtaaccatc tctggaccag
480

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cttgcagaca tgatcccttg cgtcctgcag tacctaaatt tctctacaat aattggagtt  
 540  
 ggtgttggag ctggagccta catcctggcg agatatgctc ttaaccaccc ggacactggt  
 600  
 gaaggtcttg tcctcatcaa cattgatccc aatgccaaagg gttggatgga ttgggcagcc  
 660  
 cacaagctaa caggcctcac ctcttccatt cgggagatga tccttggaca tcttttcagc  
 720  
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 780  
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 900  
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 960  
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 1080  
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 1140  
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 1260  
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 1320  
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 1380  
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 1440  
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 1560  
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 1620  
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 1680  
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 1740  
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 1920  
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 1980  
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 2100

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 2160  
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 2220  
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 2400  
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 2405

<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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			20					25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
	50					55				60					
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70					75				80	
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
				85					90					95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
			100					105					110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
	115						120					125			
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130					135					140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
145					150					155				160	
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
				165					170					175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
			180				185						190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
		195					200					205			
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
	210					215					220				
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225					230					235				240	
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
				245					250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
		260					265					270			
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys



275	280	285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala		
290	295	300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr		
305	310	315
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser		
	325	330
Gln Ser Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr		
	340	345
Met Glu Val Ser Cys		
355		

&lt;210&gt; 2941

&lt;211&gt; 847

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2941

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 120  
 ggtgccagcc ccacagcccg ccagcatctc ttttaagcagg gtcagctctc ggcccagggg  
 180  
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 240  
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 660  
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 720  
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 780  
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 840  
 ggtgcac  
 847

&lt;210&gt; 2942

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2942

Xaa Ala Leu Ser Ser Leu Arg Ala Leu Gly Ser Gln Asp Leu Pro Leu  
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 Gly Gly Asn Ala Pro Cys Ile Leu Gln Leu Asp Leu Gln His Leu His  
 20 25 30  
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
 195 200 205  
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu  
 210 215 220  
 Gln Asp Pro Gln Ala  
 225

&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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 120  
 tctagtgttt gggttttcttc ggggtgctc aagatgaacc gactcttcgg gaaagcgaaa  
 180  
 cccaaggctc cgccgccag cctgactgac tgcattggca cggaggacag tagagcagaa  
 240  
 tccattgaca agaagatttc tcgattggat gctgagctag tgaagtataa ggatcagatc  
 300  
 aagaagatga gagagggtcc tgcaaagaat atggatcaagc agaaagcctt gcgagtttta  
 360  
 aagcaaaaga ggatgtatga gcagcagcgg gacaatcttg ccaacagtca ttcaacatgg  
 420  
 aacgccatt ataccatcca gtctttgaag gacaccaaga ccacggttga tgctatgaaa  
 480

ctgggagtaa aggaaatgaa gaaggcatat aagcaagtga agatcgacca gattgaggat  
 540  
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 600  
 cgcagttatg gcaccccaga actggatgaa gatgatttag aagcagagtt ggatgcacta  
 660  
 ggtgatgagc ttctggctga tgaagacagt tcttatttgg atgagggcagc atctgcacct  
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 900  
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 960  
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<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Arg	Asn	Pro	Tyr	Phe	Arg	Asn	Lys	Leu	Ile	Val	Lys	Glu	Tyr	Glu	Val
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Cys	Ser	Phe	Phe	Thr	Trp	Phe	Ser	Asp	His	Ser	Leu	Pro	Glu	Ser	Asp
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Lys	Ile	Ala	Glu	Ile	Ile	Lys	Glu	Asp	Leu	Trp	Pro	Asn	Pro	Leu	Gln
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Tyr	Tyr	Leu	Leu	Arg	Glu	Gly	Val	Arg	Arg	Ala	Arg	Arg	Arg	Pro	Leu
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&lt;210&gt; 2947

&lt;211&gt; 997

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

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<211> 332

<212> PRT

<213> Homo sapiens

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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
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Leu	Trp	Arg	Leu	Pro	Gly	Pro	Gly	Gln	Ala	Leu	Pro	Ser	Ala	Pro	Gly
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Val	Val	Leu	Gly	Pro	Glu	Asp	Leu	Pro	Val	Glu	Val	Leu	Gln	Phe	His
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Lys	Gly	Glu	Arg	Gln	Leu	Tyr	Cys	Tyr	Glu	Val	Val	Pro	Gln	Gln	Pro
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Ala	Leu	Ser	Pro	Val	Thr	Gln	Cys	Val	Leu	Glu	Ser	Val	Leu	Arg	Gly
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<213> Homo sapiens

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 Pro Lys Tyr Leu Ile Val Val Arg Pro Ala Pro Pro Pro Ser Gln Lys  
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 Pro Asn Thr Val Tyr Glu Phe Gly Val Lys Asp Asn Val Glu Gly Gly  
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<210> 2952

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Gly	Ser	Pro	Arg	Glu	Phe	Ile	Tyr	Leu	Asn	Arg	Tyr	Lys	Arg	Ala	Gly	35	40	45	
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Val	Thr	Gly	Ala	Ile	Cys	Val	Asn	Ser	Lys	Glu	Pro	Glu	Val	Leu	Leu	65	70	75	80
Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu	Leu	Leu	Asn	Asn	Glu	Leu	85	90	95	
Leu	Lys	Gln	Lys	Arg	Gln	Ile	Glu	Thr	Leu	Gln	Gln	Leu	Val	Glu	Val	100	105	110	
Asp	Gly	Gly	Ile	Val	Ser	Glu	Val	Lys	Leu	Leu	Arg	Lys	Glu	Ser	Arg	115	120	125	
Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	Gln	Leu	Leu	His	Glu	130	135	140	
Ile	Ile	Arg	Lys	Arg	Asp	Asn	Ala	Leu	Glu	Leu	Ser	Gln	Leu	Glu	Asn	145	150	155	160
Arg	Ile	Leu	Asn	Gln	Thr	Ala	Asp	Met	Leu	Gln	Leu	Ala	Ser	Lys	Tyr	165	170	175	
Lys	Asp	Leu	Glu	His	Lys	Phe	Gln	His	Leu	Ala	Met	Leu	Ala	His	Asn	180	185	190	
Gln	Ser	Glu	Ile	Ile	Ala	Gln	Leu	Glu	Glu	His	Cys	Gln	Arg	Val	Pro	195	200	205	
Ser	Ala	Arg	Pro	Val	Pro	Gln	Pro	Pro	Pro	Ala	Ala	Pro	Pro	Arg	Val	210	215	220	
Tyr	Gln	Pro	Pro	Thr	Tyr	Asn	Arg	Ile	Ile	Asn	Gln	Ile	Ser	Thr	Asn	225	230	235	240
Glu	Ile	Gln	Ser	Asp	Gln	Asn	Leu	Lys	Val	Leu	Pro	Pro	Pro	Leu	Pro	245	250	255	
Thr	Met	Pro	Thr	Leu	Thr	Ser	Leu	Pro	Ser	Ser	Thr	Asp	Lys	Pro	Ser	260	265	270	
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<210> 2953
<211> 1377
<212> DNA
<213> Homo sapiens
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<210> 2954

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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		20						25					30		
Leu	Ala	Ala	Gly	Ala	Val	Thr	Leu	Leu	Ser	Leu	Tyr	Leu	Leu	Phe	Gly
		35					40					45			
Tyr	Gly	Ala	Ser	Leu	Leu	Cys	Asn	Leu	Ile	Gly	Phe	Val	Tyr	Pro	Ala
	50					55					60				
Tyr	Ala	Ser	Ile	Lys	Ala	Ile	Glu	Ser	Pro	Ser	Lys	Asp	Asp	Asp	Thr
65					70					75					80
Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
			85						90					95	
Phe	Phe	Ser	Asp	Leu	Leu	Leu	Ser	Trp	Phe	Pro	Phe	Tyr	Tyr	Val	Gly
			100					105					110		
Lys	Cys	Ala	Phe	Leu	Leu	Phe	Cys	Met	Ala	Pro	Arg	Pro	Trp	Asn	Gly
		115					120					125			
Ala	Leu	Met	Leu	Tyr	Gln	Arg	Val	Val	Arg	Pro	Leu	Phe	Leu	Arg	His
		130				135						140			
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145					150					155					160
Asp	Ala	Ala	Ala	Gly	Ile	Thr	Arg	Asn	Val	Lys	Pro	Ser	Gln	Thr	Pro
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&lt;210&gt; 2955

&lt;211&gt; 295

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2955

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295

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&lt;210&gt; 2956

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2956

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20           25           30
Ser Gln Gly Met Pro Cys Pro Cys Leu Thr Phe Pro Leu Phe Trp His
35           40           45
Ile Asn Ser Tyr Phe Pro Ile Ser His Tyr Lys Gly His Thr Val Leu
50           55           60
Pro Leu Pro Leu Ser Ser Lys Ile Ala Ser Pro Pro Phe Ser Leu Ile
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&lt;210&gt; 2957

&lt;211&gt; 4724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2957

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&lt;210&gt; 2958

&lt;211&gt; 1047

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2958

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Ala	Ile	Val	Val	Ser	Val	Gly	Val	Asp	Glu	Glu	Ile	Val	Tyr	Ala	Lys
			35				40						45		
Ser	Thr	Ala	Leu	Gln	Thr	Trp	Leu	Phe	Gly	Tyr	Glu	Leu	Thr	Asp	Thr
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Ile	Met	Val	Phe	Cys	Asp	Asp	Lys	Ile	Ile	Phe	Met	Ala	Ser	Lys	Lys

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Lys	Val	Glu	Phe	Leu	Lys	Gln	Ile	Ala	Asn	Thr	Lys	Gly	Asn	Glu	Asn
				85					90					95	
Ala	Asn	Gly	Ala	Pro	Ala	Ile	Thr	Leu	Leu	Ile	Arg	Glu	Lys	Asn	Glu
			100					105						110	
Ser	Asn	Lys	Ser	Ser	Phe	Asp	Lys	Met	Ile	Glu	Ala	Ile	Lys	Glu	Ser
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Val	Phe	Asn	Lys	Phe	Phe	Lys	Glu	Arg	Val	Met	Glu	Ile	Val	Asp	Ala
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Asp	Glu	Lys	Val	Arg	His	Ser	Lys	Leu	Ala	Glu	Ser	Val	Glu	Lys	Ala
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Ile	Glu	Glu	Lys	Lys	Tyr	Leu	Ala	Gly	Ala	Asp	Pro	Ser	Thr	Val	Glu
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Phe	Ser	Val	Val	Ser	Asp	Lys	Asn	His	Met	His	Phe	Gly	Ala	Ile	Thr
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Cys	Ala	Met	Gly	Ile	Arg	Phe	Lys	Ser	Tyr	Cys	Ser	Asn	Leu	Val	Arg
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Thr	Leu	Met	Val	Asp	Pro	Ser	Gln	Glu	Val	Gln	Glu	Asn	Tyr	Asn	Phe
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Leu	Leu	Gln	Leu	Gln	Glu	Glu	Leu	Leu	Lys	Glu	Leu	Arg	His	Gly	Val
305				310						315					320
Lys	Ile	Cys	Asp	Val	Tyr	Asn	Ala	Val	Met	Asp	Val	Val	Lys	Lys	Gln
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&lt;211&gt; 3323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2959

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<212> PRT

<213> Homo sapiens

<400> 2960

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&lt;211&gt; 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2961

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Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu
          50          55          60
Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
65          70          75          80
Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
          85          90          95
Asp Glu Cys Ser Asp Arg Arg Gly Gly Cys Pro Gln Arg Cys Val His
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Pro Ala Gly
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<210> 2965

<211> 3739

<212> DNA

<213> Homo sapiens

<400> 2965

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&lt;210&gt; 2966

&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2966

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				20					25				30		
Pro	Phe	Pro	Leu	Leu	Met	Asn	Arg	Gln	Arg	Val	Pro	Lys	Val	Leu	Val
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				85					90					95	
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			100					105					110		
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Tyr	Val	Leu	Lys	Tyr	Met	Glu	Ser	Asn	Ala	Ala	Gln	Tyr	Ser	Pro	Glu
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Cys	Lys	Asp	Asn	Ile	Arg	Glu	Ala	Phe	Gln	Ile	Tyr	Asp	Lys	Glu	Ala
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Ser	Gly	Tyr	Val	Asp	Arg	Asp	Met	Phe	Phe	Lys	Ile	Cys	Glu	Ser	Leu
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<212> DNA
<213> Homo sapiens
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<400> 2967

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&lt;210&gt; 2968

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2968

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Gly Pro Ser Lys Ser Pro Ser Gly Val Arg Cys Cys Gly Ala Ala Ala
20           25           30
Trp Glu Asp Lys Asp Glu Phe Leu Asp Val Ile Tyr Trp Phe Arg Gln
35           40           45
Ile Ile Ala Val Val Leu Gly Val Ile Trp Gly Val Leu Pro Leu Arg
50           55           60
Gly Phe Leu Gly Ile Ala Gly Phe Cys Leu Ile Asn Ala Gly Val Leu

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65		70		75		80									
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Gly	Thr	Trp	Glu	Leu	Thr	Lys	Glu	Gly	Phe	Met	Thr	Ser	Phe	Ala	Xaa
		100					105						110		
Val	His	Gly	His	Leu	Asp	His	Leu	Leu	His	Cys	His	Pro	Leu		
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&lt;210&gt; 2969

&lt;211&gt; 667

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2969

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660
gggggca
667

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&lt;210&gt; 2970

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2970

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Arg	Asp	Ser	Lys	Leu	Thr	Arg	Leu	Leu	Gln	Asp	Ser	Leu	Gly	Gly	Asn
			20					25					30		
Ser	Gln	Thr	Ile	Met	Ile	Ala	Trp	Gly	Ser	Pro	Ser	Asn	Arg	Asp	Phe
		35				40						45			
Met	Glu	Thr	Leu	Asn	Thr	Leu	Lys	Tyr	Ala	Asn	Arg	Ala	Arg	Asn	Ile
	50					55				60					
Lys	Asn	Lys	Val	Val	Val	Asn	Gln	Asp	Lys	Thr	Ala	Ser	Lys	Ser	Met

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<211> 6015
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 2972

&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

```

Met Asn Arg Tyr Thr Thr Ile Arg Gln Leu Gly Asp Gly Thr Tyr Gly
 1          5          10          15
Ser Val Leu Leu Gly Arg Ser Ile Glu Ser Gly Glu Leu Ile Ala Ile
      20          25          30
Lys Lys Met Lys Arg Lys Phe Tyr Ser Trp Glu Glu Cys Met Asn Leu
      35          40          45
Arg Glu Val Lys Ser Leu Lys Lys Leu Asn His Ala Asn Val Val Lys
      50          55          60
Leu Lys Glu Val Ile Arg Glu Asn Asp His Leu Tyr Phe Ile Phe Glu
      65          70          75          80
Tyr Met Lys Glu Asn Leu Tyr Gln Leu Ile Lys Glu Arg Asn Lys Leu
      85          90          95
Phe Pro Glu Ser Ala Ile Arg Asn Ile Met Tyr Gln Ile Leu Gln Gly
      100          105          110
Leu Ala Phe Ile His Lys His Gly Phe Phe His Arg Asp Leu Lys Pro
      115          120          125
Glu Asn Leu Leu Cys Met Gly Pro Glu Leu Val Lys Ile Ala Asp Phe
      130          135          140
Gly Leu Ala Arg Glu Ile Arg Ser Lys Pro Pro Tyr Thr Asp Tyr Val
      145          150          155          160
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
      165          170          175
Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
      180          185          190
Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
      195          200          205
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
      210          215          220
Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln
      225          230          235          240
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
      245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
      260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
      275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
      290          295          300
Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
      305          310          315          320
Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg
      325          330          335
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
      340          345          350
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
      355          360          365
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
      370          375          380
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
      385          390          395          400
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp

```

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                405                410                415
Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg
                420                425                430
Ile Asp Leu Lys Asn Lys Lys Arg Gln Ser Asp Asp Thr Leu Cys Arg
                435                440                445
Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly
                450                455                460
Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr
465                470                475                480
Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu
                485                490                495
Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu
                500                505                510
Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser
                515                520                525
Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser
                530                535                540
Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu
545                550                555                560
Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile
                565                570                575
Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His
                580                585                590
Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu
                595                600                605
Ile Pro Arg Pro Pro Ala Ala Gln Pro Val His Gly Arg Thr Asp Trp
        610                615                620
Ala Ser Lys Tyr Ala Ser Arg Arg
625                630

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&lt;210&gt; 2973

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2973

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420
gtcccatgg ggagcatcat ctcttcgacc ctaaagatgt caaagggtg cagcttccaa
480
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540

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 720  
 aaggcttcat cctttgtatg taaccatttg gcaaaagtat gcaggaacat aaaataaaat  
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<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

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Ser	Tyr	Arg	Ile	Gly	Pro	Val	Glu	Val	Glu	Ser	Ala	Leu	Ala	Glu	His
			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
			35				40					45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
	50					55					60				
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70					75				80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
			85					90					95		
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
			100					105					110		
Gln	Glu	Trp	Gly	Lys											
			115												

<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 gagaagttgc tagtggtcac cgcagctggg gtgaaaccgg ggnncaaggt ggctggcttt  
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 360



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 420  
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 480  
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 1200  
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 1425

&lt;210&gt; 2976

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2976

Pro	Ser	Thr	Thr	Gly	Thr	Gln	Glu	Leu	Lys	Pro	Gly	Leu	Glu	Gly	Ser
1				5				10					15		
Leu	Gly	Val	Gly	Asp	Thr	Met	Tyr	Thr	Val	Asn	Gly	Val	His	Pro	Leu
		20					25					30			
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
		35				40					45				
Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
	50				55					60					
Leu	Pro	Lys	Lys	Arg	Met	Gly	Lys	Ser	Asn	Pro	Gly	Trp	Glu	Asn	Leu
65				70					75					80	
Glu	Lys	Leu	Leu	Val	Phe	Thr	Ala	Ala	Gly	Val	Lys	Pro	Gly	Xaa	Lys

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<210> 2977
<211> 1420
<212> DNA
<213> Homo sapiens
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<400> 2977
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120
attgcagaga aaagggccgt cctggcccac gtggatgtgc agacgctgtc cagccagctg
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 1420

&lt;210&gt; 2978

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2978

Xaa	Ser	Asn	Ile	His	Ala	Glu	Tyr	Arg	Met	Val	Val	Gly	Gly	Ala	Gln
1				5					10					15	
Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala	Ala	Glu	Trp	Ile	Gln
			20					25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
			35				40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
			50				55				60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65					70				75					80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105				110			
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

```

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Ala Met Arg Ala Asp Xaa Ile Ala Met Glu Lys Val Ala Ser Arg Thr
      130              135              140
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr
145              150              155              160
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg
      165              170              175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
      180              185              190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
      195              200              205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
      210              215              220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
225              230              235              240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245              250              255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
      260              265              270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
      275              280              285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
      290              295              300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
305              310              315              320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
      325              330              335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
      340              345              350
Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys Arg Leu Arg Lys
      355              360              365
Arg

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&lt;210&gt; 2979

&lt;211&gt; 2191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

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420

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 50 55 60  
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu  
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<210> 2984

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<213> Homo sapiens

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Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
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<213> Homo sapiens

<400> 2985

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<212> PRT

<213> Homo sapiens

<400> 2986

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Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
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Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro
945					950					955				960
Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys
			965						970					975
Val	Leu	Asp	Phe	Tyr	Lys	Gln	Trp	Lys	Glu	Ile	Gly			

980

985

&lt;210&gt; 2987

&lt;211&gt; 1016

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2987

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&lt;210&gt; 2988

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2988

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Trp Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile Ser
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Ala His Cys Lys Leu His Leu Pro Gly Ser His His Pro Pro Ala Ser
20           25           30
Ala Ser Arg Val Ala Gly Thr Thr Gly Thr Arg His Asn Ala Arg Leu

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<210> 2990  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 2990  
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 Trp Glu Glu Trp Gln Asp Leu Asp Asp Ala Gln Arg Thr Leu Tyr Arg  
 35 40 45  
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys  
 50 55 60  
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro  
 65 70 75 80  
 Trp Ile Val Glu Glu Thr Leu Asn Leu Arg Leu Ser Gly Gly Ser Lys  
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 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln  
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<210> 2991  
 <211> 980  
 <212> DNA  
 <213> Homo sapiens

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<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

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His	Thr	Gly	Pro	Phe	Thr	Glu	Val	Ser	Pro	Gly	Ala	Leu	Gly	Trp	Pro
		20						25				30			
Val	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Gly	Gly	Leu	Gly	Ala	Ala	His	Phe
	35					40				45					
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<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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 420  
 atgaagccgc gggtccttca gcgctggagc cgccaaatcc tgcggggact tcatttccta  
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<210> 2994  
<211> 229  
<212> PRT  
<213> Homo sapiens

<400> 2994  
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20 25 30  
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35 40 45  
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp  
50 55 60  
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser  
65 70 75 80  
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly  
85 90 95  
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val  
100 105 110  
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser  
115 120 125  
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg  
130 135 140  
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu  
145 150 155 160  
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn  
165 170 175  
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly  
180 185 190  
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr  
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Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala  
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Val Asp Val Tyr Ala  
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<210> 2995  
<211> 1879  
<212> DNA  
<213> Homo sapiens

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1680  
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1740  
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1860

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<210> 2996  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2996  
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20 25 30  
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln  
35 40 45  
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser  
50 55 60  
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys  
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Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg  
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Thr Pro Asp Leu Lys  
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<210> 2997  
<211> 800  
<212> DNA  
<213> Homo sapiens

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240  
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<210> 2998  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 2998  
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 20 25 30  
 Ser Thr Ile Lys Asp Ile Val Ser Thr Thr Ile Pro Ala Ser Ser Glu  
 35 40 45  
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro  
 50 55 60  
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser  
 65 70 75 80  
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met  
 85 90 95  
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr  
 100 105 110  
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser  
 115 120 125  
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly  
 130 135 140  
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr  
 145 150 155 160  
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His  
 165 170 175  
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp  
 180 185 190  
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu  
 195 200 205  
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln  
 210 215 220  
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu  
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 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro  
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 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe  
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<210> 2999  
 <211> 550  
 <212> DNA  
 <213> Homo sapiens

<400> 2999  
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 180  
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 420  
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc  
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<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

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Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
			20					25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35					40					45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55				60					
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
65					70				75					80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
			85					90					95		
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
			100					105					110		
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
		115					120					125			
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135					140				
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
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<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

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 180  
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 240  
 actgagggcat ccagcccagc tcaggccctg ccaccennca gtaccaaagc atcattgtca  
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 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

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Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
			35				40					45			
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

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<400> 3004
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Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
          20          25          30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
          35          40          45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
          50          55          60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65          70          75          80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
          85          90          95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
          100          105          110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
          115          120          125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130 135 140  
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser  
 145 150 155

<210> 3005

<211> 799

<212> DNA

<213> Homo sapiens

<400> 3005

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<210> 3006

<211> 266

<212> PRT

<213> Homo sapiens

<400> 3006

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 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg  
 35 40 45  
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys  
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 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

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Arg	Arg	Ile	Val	Leu	Pro	Ala	Ile	Asp	Asn	Ile	Lys	Tyr	Ser	Thr	Phe
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Glu	Ser	Ala	Pro	Ile	Arg	Thr	Pro	Ala	Met	Ile	Gly	Cys	Ser	Phe	Val
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Val	Asp	Arg	Glu	Tyr	Phe	Gly	Asp	Ile	Gly	Leu	Leu	Asp	Pro	Gly	Met
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Glu	Val	Tyr	Gly	Gly	Glu	Asn	Val	Glu	Leu	Gly	Met	Arg	Val	Trp	Gln
			180					185				190			
Cys	Gly	Gly	Ser	Met	Glu	Val	Leu	Pro	Cys	Ser	Arg	Val	Ala	His	Ile
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Glu	Arg	Thr	Arg	Lys	Pro	Tyr	Asn	Asn	Asp	Ile	Asp	Tyr	Tyr	Ala	Lys
	210					215				220					
Arg	Asn	Ala	Leu	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Asp	Phe	Lys	Ser
225					230					235				240	
His	Val	Tyr	Met	Ala	Trp	Asn	Ile	Pro	Met	Ser	Asn	Pro	Gly	Val	Asp
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Phe	Gly	Asp	Val	Ser	Glu	Arg	Leu	Ala	Leu						
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&lt;210&gt; 3007

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3007

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&lt;210&gt; 3008

&lt;211&gt; 163

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3008

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Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
          35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
          50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
          85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
          100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
          115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
          130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
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Pro Ser Arg

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<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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catggcagta gtctctctgt tctccgcgcg cgctagccta gctgagtcgc cggtttctgc
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240
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300
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660

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<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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Glu	Arg	Leu	Glu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val
		20					25						30		
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
	35					40					45				
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
	50				55					60					
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
65				70					75					80	
Gly	Gln	Val	Met	Ala	Leu	Lys	Met	Asn	Thr	Leu	Ser	Ser	Asn	Arg	Ala
			85					90					95		
Asn	Met	Leu	Lys	Glu	Val	Gln	Leu	Met	Asn	Arg	Leu	Ser	His	Pro	Asn
		100					105					110			
Ile	Leu	Arg	Phe	Met	Gly	Val	Cys	Val	His	Gln	Gly	Gln	Leu	His	Ala
	115				120					125					
Leu	Thr	Glu	Tyr	Ile	Asn	Ser	Gly	Asn	Leu	Glu	Gln	Leu	Leu	Asp	Ser
	130				135					140					
Asn	Leu	His	Leu	Pro	Trp	Thr	Val	Arg	Val	Lys	Leu	Ala	Tyr	Asp	Ile
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Ala	Val	Gly	Leu	Ser	Tyr	Leu	His	Phe	Lys	Gly	Ile	Phe	His	Arg	Asp
			165					170					175		
Leu	Thr	Ser	Lys	Asn	Cys	Leu	Ile	Lys	Arg	Asp	Glu	Asn	Gly	Tyr	Ser

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Ala Val Val Ala Asp Phe Gly Leu Ala Glu Lys Ile Pro Asp Val Ser					
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Met Gly Ser Glu Lys Leu Ala Val Val Gly Ser Pro Phe Trp Met Ala					
	210		215		220
Pro Glu Val Leu Arg Asp Glu Pro Tyr Asn Glu Lys Ala Asp Val Phe					
225		230		235	240
Ser Tyr Gly Ile Ile Leu Cys Glu Ile Ile Val Arg Ile Gln Ala Asp					
	245		250		255
Pro Asp Tyr Leu Pro Arg Thr Glu Asn Phe Gly Leu Asp Tyr Asp Ala					
	260		265		270
Phe Gln His Met Val Gly Asp Cys Pro Pro Asp Phe Leu Gln Leu Thr					
	275		280		285
Phe Asn Cys Cys Asn Val Ser Val Phe Leu Pro Leu Pro Phe Ile Arg					
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Gly Trp Leu Asn Pro Phe					
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&lt;210&gt; 3011

&lt;211&gt; 3253

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3011

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<210> 3012

<211> 870

<212> PRT

<213> Homo sapiens

<400> 3012

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			20					25					30		
Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
		35					40					45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
	50					55					60				
Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
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Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
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Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
			100					105					110		
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Val	Pro	Pro	Ser	Val	Glu	Lys	Gly	Leu	Pro	Pro	Ser	Asn	His	His	Ala	
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Val	Tyr	Asp	Val	Pro	Pro	Ser	Val	Ser	Lys	Asp	Val	Pro	Asp	Gly	Pro	
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Leu	Leu	Arg	Glu	Glu	Thr	Tyr	Asp	Val	Pro	Pro	Ala	Phe	Ala	Lys	Ala	
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Lys	Pro	Phe	Asp	Pro	Ala	Arg	Thr	Pro	Leu	Val	Leu	Gly	Ala	Pro	Pro	
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Pro	Asp	Ser	Pro	Pro	Ala	Glu	Asp	Val	Tyr	Tyr	Val	Pro	Pro	Pro	Ala	
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Pro	Asp	Leu	Tyr	Asp	Val	Pro	Pro	Gly	Leu	Arg	Arg	Pro	Gly	Pro	Gly	
370								375				380				
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Asp	Arg	Leu	Val	Ala	Cys	Ser	Arg	Ala	Val	Pro	Glu	Asp	Ala	Lys	Gln	
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Pro Thr Asp Lys Thr Ser	Ser Ile Gln Ser Arg Pro	Leu Pro Ser Pro
625	630	635
Pro Lys Phe Thr Ser Gln	Asp Ser Pro Asp Gly Gln	Tyr Glu Asn Ser
645	650	655
Glu Gly Gly Trp Met Glu	Asp Tyr Val His Leu	Gln Gly Lys
660	665	670
Glu Glu Phe Glu Lys Thr	Gln Lys Glu Leu Leu	Glu Lys Gly Asn Ile
675	680	685
Thr Arg Gln Gly Lys Ser	Gln Leu Glu Leu Gln	Gln Leu Lys Gln Phe
690	695	700
Glu Arg Leu Glu Gln Glu	Val Ser Arg Pro Ile	Asp His Asp Leu Ala
705	710	715
Asn Trp Thr Pro Ala Gln	Pro Leu Ala Pro Gly	Arg Thr Gly Gly Leu
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785	790	795
Arg Gln Ala Lys Ala Ala	Asp Val Arg Ser Gln	Val Thr His Tyr Ser
805	810	815
Asn Leu Leu Cys Asp Leu	Leu Arg Gly Ile Val	Ala Thr Thr Lys Ala
820	825	830
Ala Ala Leu Gln Tyr Pro	Ser Pro Ser Ala Ala	Gln Asp Met Val Glu
835	840	845
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&lt;210&gt; 3013

&lt;211&gt; 248

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3013

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 35 40 45  
 Val Pro Gly Gly Met Val His Pro Ile Phe Leu Glu Pro Val Thr Val

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&lt;210&gt; 3017

&lt;211&gt; 4796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3017

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 <212> PRT  
 <213> Homo sapiens

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 Lys Ala Asn Arg Ala Ile Pro Gln Ala Val Thr Ser Thr Arg Leu Gly  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

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			20					25					30		
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
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Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
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<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

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			20					25					30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40					45			
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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&lt;210&gt; 3024

<211> 347  
 <212> PRT  
 <213> Homo sapiens

<400> 3024

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Met	Leu	Arg	Ser	His	Val	Leu	Val	Met	Ser	Phe	Ile	Gly	Lys	Asp	Asp
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65				70					75					80	
Arg	Glu	Leu	Tyr	Leu	Gln	Val	Ile	Gln	Tyr	Met	Arg	Arg	Met	Tyr	Gln
			85					90						95	
Asp	Ala	Arg	Leu	Val	His	Ala	Asp	Leu	Ser	Glu	Phe	Asn	Met	Leu	Tyr
			100					105						110	
His	Gly	Gly	Gly	Val	Tyr	Ile	Ile	Asp	Val	Ser	Gln	Ser	Val	Glu	His
	115						120					125			
Asp	His	Pro	His	Ala	Leu	Glu	Phe	Leu	Arg	Lys	Asp	Cys	Ala	Asn	Val
	130					135					140				
Asn	Asp	Phe	Phe	Met	Arg	His	Ser	Val	Ala	Val	Met	Thr	Val	Arg	Glu
145				150						155				160	
Leu	Phe	Glu	Phe	Val	Thr	Asp	Pro	Ser	Ile	Thr	His	Glu	Asn	Met	Asp
			165						170					175	
Ala	Tyr	Leu	Ser	Lys	Ala	Met	Glu	Ile	Ala	Ser	Gln	Arg	Thr	Lys	Glu
			180					185						190	
Glu	Arg	Ser	Ser	Gln	Asp	His	Val	Asp	Glu	Glu	Val	Phe	Lys	Arg	Ala
		195					200					205			
Tyr	Ile	Pro	Arg	Thr	Leu	Asn	Glu	Val	Lys	Asn	Tyr	Glu	Arg	Asp	Met
	210					215					220				
Asp	Ile	Ile	Met	Lys	Leu	Lys	Glu	Glu	Asp	Met	Ala	Met	Asn	Ala	Gln
225				230						235				240	
Gln	Asp	Asn	Ile	Leu	Pro	Asp	Cys	Tyr	Arg	Ile	Glu	Glu	Arg	Phe	Val
			245						250					255	
Arg	Ser	Ser	Glu	Gly	Pro	Cys	Thr	Leu	Glu	Asn	Gln	Val	Glu	Glu	Arg
			260					265					270		
Thr	Cys	Ser	Asp	Ser	Glu	Asp	Ile	Gly	Ser	Ser	Glu	Cys	Ser	Asp	Thr
	275						280					285			
Asp	Ser	Glu	Glu	Gln	Gly	Asp	His	Ala	Arg	Pro	Lys	Lys	His	Thr	Thr
	290					295					300				
Asp	Pro	Asp	Ile	Asp	Lys	Lys	Glu	Arg	Lys	Lys	Met	Val	Lys	Glu	Ala
305				310						315				320	
Gln	Arg	Glu	Lys	Arg	Lys	Asn	Lys	Ile	Pro	Lys	His	Val	Lys	Lys	Arg
			325					330						335	
Lys	Glu	Lys	Thr	Ala	Lys	Thr	Lys	Lys	Gly	Lys					
			340					345							

<210> 3025  
 <211> 1370  
 <212> DNA  
 <213> Homo sapiens

<400> 3025  
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120  
agcttctgaa gcatctaggt gatcttctta aatctttgac aggaaagagt aggaaacttt  
180  
ttggcagact tttacctggt gaatggactt gttttagaat caaggaaaag aagagaacat  
240  
ctcagtgaag aggatattct tcgaaataag gccatcatgg agagtttgag taaaggtgga  
300  
aacataatgg aacagaattt tgagccgatt cgaagacagt ctcttacacc tcctcctcag  
360  
aacactatta catgggaaga atatatatct gctgaaaatg gaaaagctcc tcactctgggt  
420  
agagaattgg tgtgcaaaga gagtaagaaa acgttttaaag ctacgatagc catgagccag  
480  
gaatttcctt tagggataga gttattattg aatgttttag aagtagtagc tccttcaag  
540  
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa  
600  
ttagatatac ctgtgtttcc cacaatcaca gccactgtga cttttcagga gtttcgatac  
660  
gatgaatttg atggctccat ctttactata cctgatgact acaaggaaga cccaagccgt  
720  
tttctgac ttttaactgac gtggaaaagg atgccgtcta accaaggaaa gaaaatacag  
780  
agaccctaga agtggatcca aatagaaggg acaaagctt tcagtgaaga aaagggaatt  
840  
acacattgaa tcgacacatc agtaatacga tacagtgaag tgggcctcta ataagaattt  
900  
cagcgagttt tctgatgtgc ctttttttgt ctttttaaaa atatacatat tataaatgta  
960  
atagtttgac acattaatga ccctaagacc tgcgtatgtg aagcagctat gagtgtgtg  
1020  
atttgttttt aaaaattttt acacttcttg ttgaaatata tatgcatata aatatatcta  
1080  
tatctatct tatatctaaa acactcctgg accattaacg taaattaaat gtcttaagag  
1140  
atatggagcc ctttttaaact tgcacatctt atgcaagggt acatttataa atattccttc  
1200  
gagctttggt ttcataaaat gtaaaactatg taacattatg tatagttcag taatttgaat  
1260  
gtttgttcaa tataatgaac tagaagggaat gcaattttct gtagatgaat gaaccaaatg  
1320  
gtaaccatta aacaattgca tttaaaaaaa aaaaaaaaaa aaaaaaaaaa  
1370

<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3026

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Met Glu Ser Leu Ser Lys Gly Gly Asn Ile Met Glu Gln Asn Phe Glu
 1           5           10           15
Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr
      20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
      35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
      50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val
      65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
      85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
      100           105           110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
      115           120           125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
      130           135           140
Asp Pro Ser Arg Phe Pro Asp Leu
      145           150

```

&lt;210&gt; 3027

&lt;211&gt; 1154

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3027

```

nccgttttcc cgctgcacgt ggtggccact gttggcttct gaatggtttg caaggcggat
60
atccacgccca aggccttttg atcggccgtg ggtacatccg tctgagccgt tcctttccat
120
cgcagacggc ggctccgcg gcgctctcca gtcattggact accggcggct tctcatgagc
180
cgggtggtcc cggggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg
240
aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
300
aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
360
tgggactggg atgaaggagt tggaaaactc gccaaagggtt atgtctggaa tggaggaagc
420
aaccacagg caaatcgaca gacctccgac agcagttcag ccaaaatgtc tactccagca
480
gacaaggtct tacggaaatt tgagaataaa attaatttag ataagctaaa tgttactgat
540
tccgtcataa ataaagtcac cgaaaagtct agacaaaagg aagcagatat gtatcgcatc
600
aaagataagg cagacagagc aactgtagaa caggtgttgg atcccagaac aagaatgatt
660
ttattcaaga tgttgactag aggaatcata acagagataa atggctgcat tagcacagga
720
aaagaagcta atgtatacca tgctagcaca gcaaaggag agagcagagc aatcaaaatt
780

```

tataaaactt ctattttggt gttcaaagat cgggataaat atgtaagtgg agaattcaga  
 840  
 tttcgtcatg gctattgtaa aggaaaccct aggaaaatgg tgaaaacttg ggcagaaaaa  
 900  
 gaaatgagga acttaatcag gctaaacaca gcagagatac catgtccaga accaataatg  
 960  
 ctaagaagtc atgttcttgt catgagtttc atcggtaaag atgacatttc ttttcattca  
 1020  
 aggctgcac cactcttgaa aaatgtccag ttatcagaat ccaaggctcg ggagttgtac  
 1080  
 ctgcaggtca ttcagtacat gagaagaatg tatcaggatg ccagacttgt ccatgcagat  
 1140  
 cgtcggtgag aggc  
 1154

<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

Met	Asp	Tyr	Arg	Arg	Leu	Leu	Met	Ser	Arg	Val	Val	Pro	Gly	Gln	Phe
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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
		20						25				30			
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35				40					45				
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50					55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85					90					95		
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
		100						105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
	115					120					125				
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
	130					135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150				155					160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
				165				170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
			180				185						190		
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
	195						200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210					215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230					235				240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
				245				250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

```

                260                265                270
His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp Ile Ser Phe His
                275                280                285
Ser Arg Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys
                290                295                300
Ala Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr
305                310                315                320
Gln Asp Ala Arg Leu Val His Ala Asp Arg Arg
                325                330

```

&lt;210&gt; 3029

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3029

```

acgcgtgatg cacggaaggg ccttcggttt ttgcattttc cttatctgct gaccttacag
60
ctgaaaagat tcgattttga ttatacaacc atgcatagga ttaaactgaa tgatcgaatg
120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggg gttgatgaag gaatctgttt tgaaaccaat
300
agtggaaactg aaaagatctc aaaatctgga cctgaaaaga attc
344

```

&lt;210&gt; 3030

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3030

```

Thr Arg Asp Ala Arg Lys Gly Leu Arg Phe Leu His Phe Pro Tyr Leu
1         5         10         15
Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
20        25        30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
35        40        45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
50        55        60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
65        70        75        80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
85        90        95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
100       105       110
Lys Asn

```

&lt;210&gt; 3031

&lt;211&gt; 567

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3031

gctgaagaag cggaggatca tggacgcac cccgaccctg atgattttgt gccgcctgtg  
 60  
 cctccccctt cctattttgc cacgttttac tegtgcacac cccggatgaa ccgcagattg  
 120  
 gttggctctg atgttattcc cctgccacac atctacggag ctgcaatcaa aggtgtggaa  
 180  
 gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtgagcca gatggaccag  
 240  
 gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat  
 300  
 ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat  
 360  
 gcatccacct caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc  
 420  
 ccacccttga ggaccaggtc gaagagtgac cctgtgctcc atccttctga ggagagagct  
 480  
 gccccagtgc tcagctgtga agctgcaaca cagactgaaa ggagactgga tctggctgca  
 540  
 gtgactctga ggagaggctt gagatct  
 567

&lt;210&gt; 3032

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3032

Ala Glu Glu Ala Glu Asp His Gly Arg Ile Pro Asp Pro Asp Asp Phe  
 1 5 10 15  
 Val Pro Pro Val Pro Pro Pro Ser Tyr Phe Ala Thr Phe Tyr Ser Cys  
 20 25 30  
 Thr Pro Arg Met Asn Arg Arg Leu Val Gly Pro Asp Val Ile Pro Leu  
 35 40 45  
 Pro His Ile Tyr Gly Ala Arg Ile Lys Gly Val Glu Val Phe Cys Pro  
 50 55 60  
 Leu Asp Pro Pro Pro Pro Tyr Glu Ala Val Val Ser Gln Met Asp Gln  
 65 70 75 80  
 Glu Gln Gly Ser Ser Phe Gln Met Ser Glu Gly Ser Glu Ala Ala Val  
 85 90 95  
 Ile Pro Leu Asp Leu Gly Cys Thr Gln Val Thr Gln Asp Gly Asp Ile  
 100 105 110  
 Pro Asn Ile Pro Ala Glu Glu Asn Ala Ser Thr Ser Thr Pro Ser Ser  
 115 120 125  
 Thr Leu Val Arg Pro Ile Arg Ser Arg Arg Ala Leu Pro Pro Leu Arg  
 130 135 140  
 Thr Arg Ser Lys Ser Asp Pro Val Leu His Pro Ser Glu Glu Arg Ala  
 145 150 155 160  
 Ala Pro Val Leu Ser Cys Glu Ala Ala Thr Gln Thr Glu Arg Arg Leu  
 165 170 175  
 Asp Leu Ala Ala Val Thr Leu Arg Arg Gly Leu Arg Ser

180

185

&lt;210&gt; 3033

&lt;211&gt; 821

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3033

```

nnacgcgtga agggggaaaa tgacaagaca gacttggatg ttatacgaga aaatcataga
60
ttcctatgga atgaggagga cgaaatggac atgacttggg agaagagact tgctaagaaa
120
tactatgata aattatttta ggaatactgc atagcagatc tcagtaaata taaagaaaat
180
aagtttggat ttagggtggcg agtagaaaaa gaagtaattt caggaaaagg tcaatttttc
240
tgtggaaata aatattgtga taaaaaagaa ggcttaaaga gttgggaagt taattttggt
300
tatattgagc atggtgagaa gagaaatgca cttgttaaata taaggttatg ccaagaatgt
360
tccattaaat taaattttcca tcacaggaga aaagaaatca agtcaaaaaa aagaaaagat
420
aaaacccaaa aagactgtga agagtcatca cataaaaaat ccagattatc ttctgcagaa
480
gaggcctcca agaaaaaaga taaaggacat tcattcttcaa agaaatctga agattctcta
540
cttagaaact ctgatgagga agaaagtgtc tcagaatctg aactttggaa ggggtccacta
600
ccagagacag atgaaaaatc acaggaagaa gaatttgatg agtattttca ggatttgttt
660
ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcatga agttttaaac
720
ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagett ctgtgctttg
780
tcttcgcaac tacaaatcca ggttctctca gcaacaacac a
821

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&lt;210&gt; 3034

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3034

```

Xaa Arg Val Lys Gly Glu Asn Asp Lys Thr Asp Leu Asp Val Ile Arg
1           5           10          15
Glu Asn His Arg Phe Leu Trp Asn Glu Glu Asp Glu Met Asp Met Thr
20          25          30
Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu
35          40          45
Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
50          55          60
Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
65          70          75          80
Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

```



				85					90					95					
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130					135					140							
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145					150					155					160				
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165					170					175						
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180						185				190							
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
		195					200					205							
Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
		210					215					220							

&lt;210&gt; 3035

&lt;211&gt; 878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3035

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ctcgaggaag atggcctcag accacaggat acctataatt cagaaacaaa gaacaaagat
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ttgcactcca gcctctgggt cgggaaagggt gccagccta cagattctaa cccgggacgt
120
cctcagacca cgacaggggc ctcccacaca cggctcgcag aacctgtgca aggagaacca
180
caaaggatga gcactctggc ccacccaaaa ccatggcagc cctgagggca cagactggac
240
accctgcaga gtctcactct gtcattcagg gtggagtgca atggcgcaat ctcagctcac
300
tgcaacctcc cactcccggg ctcaagcaat tctcctgacc cacactcagg ccagctcct
360
tcccagactg tcattcctct tctagaagga aacagggacc ctgggggtcg gggatggccc
420
tgagctccct gctgtgcccc acacctggcg ggtctttgcc cacatgtgcc tagagtctgc
480
atgctctgcc ccatggctac ccgctgctgc ctgcaagggt ccagagtcac gtccccagt
540
agtctctgac ccggcggcca gcacaccagt gtgaatcacg tgtgtcccca gtgagtctct
600
gacccggcgg ccagcgcacc agtgtgaatc acatgcgtcc ccagtgagtc tctgaccogg
660
cgaccagagc accagtgtga atcacatgcg tccccggtga gtctctgcag ggtgtccagt
720
ctgtgccctc agggctgcca tggttttggg tgggccagag tgctcatcct ttgtggttct
780
ccttgacaaa gttctgcgag ccatgtgtgg gagggccctg tcgtggtctg aggacgtccc
840
gggttagaat ctgtaggctg ggcaccttcc gggaaccg
878

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<210> 3036  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 3036  
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 Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly  
           20                  25                  30  
 Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr  
           35                  40                  45  
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp  
       50                  55                  60  
 Pro  
 65

<210> 3037  
 <211> 3538  
 <212> DNA  
 <213> Homo sapiens

<400> 3037  
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 120  
 ctcaagctca tagtagatgc tttcctacag cagttaccca actgtgtcaa ccgagatctg  
 180  
 atagacaagg cagcaatgga tttttgcatg aacatgaaca caaaagcaaa caggaagaag  
 240  
 ttggtacggg cactcttcat agttcctaga caaagggttg atttgctacc attttatgca  
 300  
 agattgggtg ctacattgca tccctgcatg tctgatgtag cagaggatct ttgttccatg  
 360  
 ctgagggggg atttcagatt tcatgtacgg aaaaaggacc agatcaatat tgaaacaaag  
 420  
 aataaaactg ttcgttttat aggagaacta actaagttta agatgttcac caaaaatgac  
 480  
 acactgcatt gtttaaagat gcttctgtca gacttctctc atcaccatat tgaaatggca  
 540  
 tgcacctgc tggagacatg tggacggttt cttttcagat ctccagaatc tcacctgagg  
 600  
 accagtgtac ttttgagca aatgatgaga aagaagcaag caatgcatct tgatgcgaga  
 660  
 tacgtcacia tggtagagaa tgcataattac tactgcaacc cacctccagc tgaaaaaacc  
 720  
 gtgaaaaaga aacgtcctcc tctccaggaa tatgtccgga aacttttgta caaggatctc  
 780  
 tctaaggtta ccaccgagaa ggttttgaga cagatgcaag agctgccctg gcaggaccaa  
 840  
 gaagtgaag actatgttat ttgttgatg ataaacatct ggaatgtgaa atataatagt  
 900

attcattgtg tagccaacct cttagcagga ctagtgctct accaagagga tgttgggac  
960  
cacgttgtgg atggagtgtt agaagatatt cgattaggaa tggagggtta tcaacctaaa  
1020  
tttaatcaga ggcgcacag cagtgccaaag ttcttaggag aactttacaa ttaccgaatg  
1080  
gtggaatcag ctgttatttt cagaactctg tattctttta cctcatttgg tgttaatcct  
1140  
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<211> 697

<212> PRT

<213> Homo sapiens

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&lt;210&gt; 3039

&lt;211&gt; 1836

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3039

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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		20						25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
		35					40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
		50				55					60				
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
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Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
				85					90					95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
			100					105						110	
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
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Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
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Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
			35				40					45			
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
			50			55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
65				70				75					80		
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
			85					90					95		
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
			100					105					110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
			115					120							

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 180  
 tcgatattgt acctggaagg ctcggtctct gtgtttgagg acatcttcag attgattgag  
 240  
 ttctactgtg tcagtagaga cttactgccc ttcacactgc ggctacccca ggccatcctt  
 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac  
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 420  
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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50					55				60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
			85					90					95		
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115				120						125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135					140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 240  
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 300  
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctctctcac agccattcca  
 360  
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 420  
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 480  
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 540  
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 600  
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 660  
 cgcggactcg tagcagcaac ggctcagacc ccatggacga ctgctcgtcg tgcaccagcc  
 720  
 actcgagctc ggagcactac taccggggcg agatgaacgc caactactcc acgctggccg  
 780  
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

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Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35					40					45			
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
		50				55					60				

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 120  
 cagtttaaaa gatttagaga aactgtacca acttgggata caataagaga tgaagaagat  
 180  
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 240  
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 300

gatgttatta atgctatcct taagcaacat acagaagaaa aagaatttgt tgagaagcac  
360  
tttaatgact taaacatgaa agctgtggaa caagatgaac caatacctca aaaacctcag  
420  
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480  
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720  
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1140  
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1860  
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1920

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<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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			20					25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65					70					75				80	
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
				85					90					95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
				100				105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
	115						120					125			
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145					150					155				160	
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
				165					170					175	
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<210> 3055
<211> 905
<212> DNA
<213> Homo sapiens

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360
gatgagttcc caggcccagg ggccgcagcg gagacctgc aattgcaaag ccagcagctc
420
gagcttgatt gggggcagtg gggccggctg ggagggcaca gccttactgc accatggcag
480

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 660  
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 720  
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 780  
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<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35					40					45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50					55				60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65				70					75					80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
			85					90						95	
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
			100					105					110		
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
			115				120						125		
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
			130				135					140			
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150					155				160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
			165					170						175	
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
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<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

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180
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1380
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1560

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 2160  
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 2169

<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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		20						25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
		35				40					45				
Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
		50				55					60				
Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65				70					75					80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
			85						90					95	
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
			100					105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
		115					120					125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Gly	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg
		130				135					140				
Ala	Leu	Trp	Gln	Gly	Arg	Ala	Leu	Arg	Ile	Pro	Pro	Val	Gly	Pro	Ser
145				150						155				160	
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			165						170					175	
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Leu	Glu	Leu	Pro	Leu	Val
			180					185					190		
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180					
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240					
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300					
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360					
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420					
tatagagttc	agaggtctag	gtcaaaaagc	agaacaagaa	gggccaggtc	aagacctcgt
480					
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540					
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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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			20					25					30		
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Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
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Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
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Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala

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Ile	Ala	Leu	Arg	Gln	Glu	Arg	Leu	Met	Gly	Ser	Pro	Val	Ala		
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&lt;210&gt; 3061

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3061

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1140

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<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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			20					25					30		
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
			35				40					45			
Gly	Gly	Thr	Pro	Ala	Phe	Leu	Pro	Ser	Ser	Leu	Ser	Pro	Gln	Ser	Ser
			50			55					60				
Leu	Pro	Ala	Ser	Arg	Ala	Leu	Ala	Thr	Pro	Pro	Lys	Leu	His	Thr	Cys
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Gly	Arg	Tyr	Arg	His	Pro	Gly	Cys	Tyr	Thr	Cys	Ala	Asp	Cys	Gly	Leu
			100				105						110		
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
		115				120						125			
Glu	Lys	His	Ala	Arg	Gln	Arg	Tyr	Ser	Ala	Pro	Ala	Thr	Leu	Ser	Ser
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<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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		20						25				30			
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His	Ser
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Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu	His
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Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu	Ile
65					70				75					80	
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln	Glu
			85					90					95		
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg	Val
			100					105					110		
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<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

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<212> PRT  
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Leu Gln Gly Glu His Ser Gln Asn Gly Glu Glu Glu Pro Glu Thr Glu  
35 40 45  
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa  
50 55 60  
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly  
65 70 75 80  
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu  
85 90 95  
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn  
100 105 110  
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln  
115 120 125  
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys  
130 135 140  
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe  
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<210> 3067  
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<212> DNA  
<213> Homo sapiens

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180  
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420

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<210> 3068  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<400> 3068  
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 35 40 45  
 Arg Glu Pro Thr Ala Gly Ser Pro Pro Cys Ser Leu Pro Arg Pro Asp  
 50 55 60  
 Leu Gln Pro Pro Ser Thr Pro Pro Pro Val His Lys Glu Gln Lys  
 65 70 75 80  
 Lys Ser Asp Pro Pro Pro Pro Pro Gly Lys Phe Lys Ser Phe Leu  
 85 90 95  
 Pro Pro Arg Ser Pro Gly Asn Ser Ala Leu Gly Pro Arg Arg Gly Trp  
 100 105 110  
 Gly Trp Ile Ala Ala Gly Gly Ala Pro Ala Met Pro Arg Pro Pro Ser  
 115 120 125  
 Gly Ala Gly Asp Arg Glu Ile Pro Arg Asp Leu Ala Cys Ala Pro Tyr  
 130 135 140  
 Pro Pro Pro Gly Ala Gly Arg Gly Ser Glu His Arg Ser Ala Pro Gly  
 145 150 155 160  
 Arg Arg Cys Gly Ser Lys Glu Pro Glu Ala Ala Ala Ser Arg Pro Pro  
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<210> 3069  
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 <212> DNA  
 <213> Homo sapiens

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 180

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1561

&lt;210&gt; 3070

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3070

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          35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
          50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
          85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
          100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
          115          120          125
Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu
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Leu Thr Thr Glu Pro Arg Glu Asp Leu
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&lt;210&gt; 3071

&lt;211&gt; 3343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3071

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
			20					25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
			35				40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
			50			55					60				
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70				75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
				85				90						95	
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105					110		
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp



```

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Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro
      130              135              140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
      145              150              155              160
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
      210              215              220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
      225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
      305              310              315              320
Arg Pro Arg Pro Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala
      325              330              335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu
      340              345

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&lt;210&gt; 3073

&lt;211&gt; 791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3073

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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Arg	Gly	His	Glu	Arg	Phe	Arg	Ile	Ala	Ser	Ala	Cys	Leu	Asp	Glu	Leu
			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40					45			
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
	50					55					60				
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65				70					75					80	
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85					90						95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105					110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
	115					120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145				150					155					160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170						175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180					185					190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
	195					200						205			
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215					220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225				230					235					240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
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<210> 3075

<211> 603

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3075

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&lt;210&gt; 3076

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3076

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Pro Pro Pro Pro Phe Phe Ser Pro Val Gly Ala Lys Lys Lys Asn
20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145         150         155         160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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			165					170				175			
Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Lys	Pro	Arg	Glu
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Lys	Leu	Lys	Val	Asn	Phe	Gly	Thr	Pro							
		195					200								

&lt;210&gt; 3077

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3077

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<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu	35	40	45	
Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly	50	55	60	
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser	65	70	75	80
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln	Glu	85	90	95	
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu	100	105	110	
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu	Glu	115	120	125	
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala	130	135	140	
Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu	145	150	155	160
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val	Ala	165	170	175	
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro	180	185	190	
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp	195	200	205	
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr	210	215	220	
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys	Phe	225	230	235	240
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala	245	250	255	
His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln	260	265	270	
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr	Leu	275	280	285	
Leu	Leu	Cys	Ser	Pro	Gln	Pro	Asp	Gly	Lys	Val	Val	Tyr	Thr	Ser	Leu	290	295	300	
Gln	Trp	Ala	Ser	Leu	Gln											305	310		

<210> 3079

<211> 1785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3079

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1500



290                      295                      300  
 Gly Thr Pro Phe Ala Gln Phe Leu Leu Asn Ile Val Glu Asp Gly Leu  
 305                      310                      315                      320  
 Pro Leu Asp Thr Thr Glu Gln Leu Pro Asp Leu Cys Val Asn Leu Leu  
                     325                      330                      335  
 Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met  
                     340                      345                      350  
 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu  
                     355                      360                      365  
 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His  
                     370                      375                      380  
 Glu Pro Gln Pro Pro His Ser Val Leu Lys Phe Leu Gln Asp Val Phe  
 385                      390                      395                      400  
 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala  
                     405                      410                      415  
 Leu Ile Asp Ile Thr Val Arg His Ile Ala Asp Leu Ser Pro Gly Asp  
                     420                      425                      430  
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg  
                     435                      440                      445  
 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu  
                     450                      455                      460  
 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro  
 465                      470                      475                      480  
 Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly  
                     485                      490                      495  
 Gly Arg Ser Val  
                     500

&lt;210&gt; 3081

&lt;211&gt; 1902

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3081

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 60  
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 120  
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 180  
 gccgtcatca gcaagatcga gagcaccttc gcccggttcc cccacgagag ggccaccatg  
 240  
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 300  
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 540  
 accacggtca tccagcggat cttctacgcc gtgaaccggt cctgggtccg caggatcacc  
 600



tgcgccgagc tgcggaggag ctccttcctg cagaatgtgg cgctgctgga ggaggaggcg  
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 720  
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 780  
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 840  
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 900  
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 1380  
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 1440  
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 1680  
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 1740  
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 1800  
 accggcggtt cccgggcgcc tcagtcctgg acaggagcct ccaccacagg ctgtgtgaat  
 1860  
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 1902

&lt;210&gt; 3082

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3082

Met Asp Asp Met Gly Leu Val Ala Lys Ala Cys Gly Cys Pro Leu Tyr  
 1 5 10 15  
 Trp Lys Gly Pro Leu Phe Tyr Gly Ala Gly Gly Glu Arg Thr Gly Ser

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Val	Ser	Val	His	Lys	Phe	Val	Ala	Met	Trp	Arg	Lys	Ile	Leu	Gln	Asn		
35						40						45					
Cys	His	Asp	Asp	Ala	Ala	Lys	Phe	Val	His	Leu	Leu	Met	Ser	Pro	Gly		
50						55						60					
Cys	Asn	Tyr	Leu	Val	Gln	Glu	Asp	Phe	Val	Pro	Phe	Leu	Gln	Asp	Val		
65				70						75			80				
Val	Asn	Thr	His	Pro	Gly	Leu	Ser	Phe	Leu	Lys	Glu	Ala	Ser	Glu	Phe		
			85						90			95					
His	Ser	Arg	Tyr	Ile	Thr	Thr	Val	Ile	Gln	Arg	Ile	Phe	Tyr	Ala	Val		
100						105						110					
Asn	Arg	Ser	Trp	Ser	Gly	Arg	Ile	Thr	Cys	Ala	Glu	Leu	Arg	Arg	Ser		
115						120						125					
Ser	Phe	Leu	Gln	Asn	Val	Ala	Leu	Leu	Glu	Glu	Glu	Ala	Asp	Ile	Asn		
130						135						140					
Gln	Leu	Thr	Glu	Phe	Phe	Ser	Tyr	Glu	His	Phe	Tyr	Val	Ile	Tyr	Cys		
145				150						155			160				
Lys	Phe	Trp	Glu	Leu	Asp	Thr	Asp	His	Asp	Leu	Leu	Ile	Asp	Ala	Asp		
			165						170			175					
Asp	Leu	Ala	Arg	His	Asn	Asp	His	Ala	Leu	Ser	Thr	Lys	Met	Ile	Asp		
180						185						190					
Arg	Ile	Phe	Ser	Gly	Ala	Val	Thr	Arg	Gly	Arg	Lys	Val	Gln	Lys	Glu		
195						200						205					
Gly	Lys	Ile	Ser	Tyr	Ala	Asp	Phe	Val	Trp	Phe	Leu	Ile	Ser	Glu	Glu		
210						215						220					
Asp	Lys	Lys	Thr	Pro	Thr	Ser	Ile	Glu	Tyr	Trp	Phe	Arg	Cys	Met	Asp		
225				230						235			240				
Leu	Asp	Gly	Asp	Gly	Ala	Leu	Ser	Met	Phe	Glu	Leu	Glu	Tyr	Phe	Tyr		
			245						250			255					
Glu	Glu	Gln	Cys	Arg	Arg	Leu	Asp	Ser	Met	Ala	Ile	Glu	Ala	Leu	Pro		
260						265						270					
Phe	Gln	Asp	Cys	Leu	Cys	Gln	Met	Leu	Asp	Leu	Val	Lys	Pro	Arg	Thr		
275						280						285					
Glu	Gly	Lys	Ile	Thr	Leu	Gln	Asp	Leu	Lys	Arg	Cys	Lys	Leu	Ala	Asn		
290						295						300					
Val	Phe	Phe	Asp	Thr	Phe	Phe	Asn	Ile	Glu	Lys	Tyr	Leu	Asp	His	Glu		
305				310						315			320				
Gln	Lys	Glu	Gln	Ile	Ser	Leu	Leu	Arg	Asp	Gly	Asp	Ser	Gly	Gly	Pro		
			325						330			335					
Glu	Leu	Ser	Asp	Trp	Glu	Lys	Tyr	Ala	Ala	Glu	Glu	Tyr	Asp	Ile	Leu		
340						345						350					
Val	Ala	Glu	Glu	Thr	Val	Gly	Glu	Pro	Trp	Glu	Asp	Gly	Phe	Glu	Ala		
355						360						365					
Glu	Leu	Ser	Pro	Val	Glu	Gln	Lys	Leu	Ser	Ala	Leu	Arg	Ser	Pro	Leu		
370						375						380					
Ala	Gln	Arg	Pro	Phe	Phe	Glu	Ala	Pro	Ser	Pro	Leu	Gly	Ala	Val	Asp		
385				390						395			400				
Leu	Tyr	Glu	Tyr	Ala	Cys	Gly	Asp	Glu	Asp	Leu	Glu	Pro	Leu				
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<210> 3083
<211> 610
<212> DNA
<213> Homo sapiens
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 120  
 gactgggcag gccgggcccc ggcaactgtg ggtgacagtc atacttcgtg gagcccagcg  
 180  
 agcatccccg gcaagcacta ccaggctgtg ggtctgcacc tctggaaggt agagaagcgg  
 240  
 cgggtcaatc tgcctagggc cctgtccatg cccccgtgg ctggcacccg gtgccatgca  
 300  
 tacgaccggg aggtccacct gcgttgtgag ctctcaccgg gctactacct ggctgtcccc  
 360  
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 420  
 gtctccctta ggtgagagga accgcgcagt gctgctggct ctccgaggcc acaggccctt  
 480  
 ccaaggcagg atttgggcac tttccctctg tggttggcag gtgtccatgt gggaactgag  
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 600  
 gcagtggcca  
 610

<210> 3084  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 3084  
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 1 5 10 15  
 Leu Ser Trp His Arg Gly Pro Pro Cys Glu Val Tyr Ile Ala Val Leu  
 20 25 30  
 Gln Arg Ser Arg Leu His Ala Ala Asp Trp Ala Gly Arg Ala Arg Ala  
 35 40 45  
 Leu Val Gly Asp Ser His Thr Ser Trp Ser Pro Ala Ser Ile Pro Gly  
 50 55 60  
 Lys His Tyr Gln Ala Val Gly Leu His Leu Trp Lys Val Glu Lys Arg  
 65 70 75 80  
 Arg Val Asn Leu Pro Arg Val Leu Ser Met Pro Pro Val Ala Gly Thr  
 85 90 95  
 Ala Cys His Ala Tyr Asp Arg Glu Val His Leu Arg Cys Glu Leu Ser  
 100 105 110  
 Pro Gly Tyr Tyr Leu Ala Val Pro Ser Thr Phe Leu Lys Asp Ala Pro  
 115 120 125  
 Gly Glu Phe Leu Leu Arg Val Phe Ser Thr Gly Arg Val Ser Leu Arg  
 130 135 140

<210> 3085  
 <211> 1080  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3085

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cttctccaat aagaagatat tcagatattg tagtaccctg cttgttaatg gcagccattt
120
caaaagataa gaaaatggaa attaaggga atctgttcag caacaaagat cttgaggaat
180
tatgcagaca tatcaacaac agaaaccaag cagcacagca ttctcagaag cagtctactg
240
agctcttcca gtgcatgtac ttcaaagaca aagaccctgc caccgaggag cgttgcatat
300
ctgacggagt tatattattca attagaacaa atgggtgtgct tctatttata ccaagggttg
360
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420
atagctgttc tgaatggaaa ccaggatccc ttcaacgatt tcaaaacaaa attacctcta
480
ctacaacaga tggggaatct gttacgttcc atttgtttga ccatgtaacc gtaagaatat
540
ccatacaggc ctcacgttgc cattctgata caatcagact tgaaataatt agtaacaaac
600
catacaagat accaaatata gaacttattc atcagagtgc ccccttgctg aagagtggag
660
tagtgaaaga agtaactaaa tctgtggaag aagctcagct tgccaagaa gtcaaagtaa
720
acatcattca ggaggaatat caagaatata gccaaacaaa gggaaggagc ctatacacac
780
ttctagagga gatacgggac ctagctctcc tggatgtttc aaacaattat ggaatatgag
840
aggctcttac ttcactaaga gctgtcatat gtgaatgttt tacagtcttt tcaaacttaa
900
catttaatgt gtgtcactca gtgctctagt cgatcaggac tgggtagcta tttcgcatat
960
atgtanaatg ttctcagccg ggcacggtgg ctcacgcctg taacccagc actttgggag
1020
gctgaggcgg gcggatcacg aggtcaggag attgagacca toctggctaa cacggtgaaa
1080

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&lt;210&gt; 3086

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3086

```

Met Cys Val Thr Gln Cys Ser Ser Arg Ser Gly Leu Gly Ser Tyr Phe
1           5           10          15
Ala Tyr Met Xaa Asn Val Leu Ser Arg Ala Arg Trp Leu Thr Pro Val
20          25          30
Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu
35          40          45
Ile Glu Thr Ile Leu Ala Asn Thr Val Lys
50          55

```

&lt;210&gt; 3087

&lt;211&gt; 2329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3087

```

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cgagagaggg agcactgtga cacggagggg gaggctgacg actttgatcc tgggaagaag
120
gtggaggtgg agccgcccc agatcggccg gtccgagcgt gccggacaca gcagccggaa
180
atggagcgca cccatattca gcaactcctg gaacacttcc tccgccagct tcagagaaaa
240
gatcccatg gatTTTTTgc ttttctgtc acggatgcaa ttgctcctgg atattcaatg
300
ataataaaac atcccatgga ttttggcacc atgaaagaca aaattgtagc taatgaatac
360
aagtcagtta cggaatttaa ggcagatttc aagctgatgt gtgataatgc aatgacatac
420
aataggccag ataccgtgta ctacaagttg gcgaagaaga tccttcacgc aggcTTtaag
480
atgatgagca aacaggcagc tcttttgggc aatgaagata cagctgttga ggaacctgtc
540
cctgaagttg taccagtaca agtagaaact gccaaagaaat ccaaaaagcc gagtagagaa
600
gttatcagct gcatgtttga gcctgaaggg aatgcctgca gcttgacgga cagtaccgca
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720
cggttcctcc caggcggcaa gatgggctat ctgaagagga acggggacgg gagcctgtc
780
tacagcgtgg tcaacacggc cgagccgaac gctgatgagg aggagacca cccggtgact
840
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960
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1020
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1080
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1140
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1200
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1260
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1320
accctgacga cagccatttg aacttgatg agacgacgaa gctcctgcag gacctgcacg
1380
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1440

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 1800  
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 1860  
 catcgtgtca gcagagagag tctctgtaca cagccccgtg aaccctgagg agtggagtca  
 1920  
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 1980  
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 2160  
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 2220  
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 2280  
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 2329

<210> 3088

<211> 280

<212> PRT

<213> Homo sapiens

<400> 3088

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Lys	Lys	Arg	Lys	Arg	Glu	Arg	Glu	His	Cys	Asp	Thr	Glu	Gly	Glu	Ala
			20					25					30		
Asp	Asp	Phe	Asp	Pro	Gly	Lys	Lys	Val	Glu	Val	Glu	Pro	Pro	Pro	Asp
		35				40					45				
Arg	Pro	Val	Arg	Ala	Cys	Arg	Thr	Gln	Gln	Pro	Glu	Met	Glu	Arg	Thr
		50				55					60				
His	Ile	Gln	Gln	Leu	Leu	Glu	His	Phe	Leu	Arg	Gln	Leu	Gln	Arg	Lys
65				70					75					80	
Asp	Pro	His	Gly	Phe	Phe	Ala	Phe	Pro	Val	Thr	Asp	Ala	Ile	Ala	Pro
			85					90					95		
Gly	Tyr	Ser	Met	Ile	Ile	Lys	His	Pro	Met	Asp	Phe	Gly	Thr	Met	Lys
			100					105					110		
Asp	Lys	Ile	Val	Ala	Asn	Glu	Tyr	Lys	Ser	Val	Thr	Glu	Phe	Lys	Ala
			115					120					125		
Asp	Phe	Lys	Leu	Met	Cys	Asp	Asn	Ala	Met	Thr	Tyr	Asn	Arg	Pro	Asp

130		135		140	
Thr	Val	Tyr	Tyr	Lys	Leu
145		150		155	160
Met	Met	Ser	Lys	Gln	Ala
		165		170	175
Glu	Glu	Pro	Val	Pro	Glu
		180		185	190
Lys	Ser	Lys	Lys	Pro	Ser
		195		200	205
Glu	Gly	Asn	Ala	Cys	Ser
		210		215	220
Leu	Ala	Leu	Val	Glu	His
225		230		235	240
Arg	Phe	Leu	Pro	Gly	Lys
		245		250	255
Gly	Ser	Leu	Leu	Tyr	Ser
		260		265	270
Glu	Glu	Glu	Thr	His	Pro
		275		280	

&lt;210&gt; 3089

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3089

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120
gcccttacaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
180
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240
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300
ccatactcgg tactcgtctc aggagacatt aaagagcgcc tcacaaagaa ggatgactgc
360
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420
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480
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540
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600
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660
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720
ca
722

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&lt;210&gt; 3090

<211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 3090  
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 Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr  
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 Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly  
 35 40 45  
 Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser  
 50 55 60  
 Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly  
 65 70 75 80  
 Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys  
 85 90 95  
 Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu  
 100 105 110  
 Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Leu Phe Leu Ser  
 115 120 125  
 Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn  
 130 135 140  
 Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met  
 145 150 155 160  
 Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His  
 165 170 175  
 Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val  
 180 185 190  
 Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser  
 195 200 205  
 Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu  
 210 215 220  
 Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val  
 225 230 235 240

<210> 3091  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 3091  
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 240  
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<210> 3092  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 3092  
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 Ser Arg Lys Arg Glu Pro Arg Asp Gly Val Lys Glu Trp Gly Ser Gln  
                     35                    40                    45  
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly  
                     50                    55                    60  
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln  
     65                    70                    75                    80  
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 <212> DNA  
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<211> 179  
 <212> PRT  
 <213> Homo sapiens

<400> 3094  
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 35 40 45  
 Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe  
 50 55 60  
 Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly  
 65 70 75 80  
 Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu  
 85 90 95  
 Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr  
 100 105 110  
 Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr  
 115 120 125  
 Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile  
 130 135 140  
 Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu  
 145 150 155 160  
 Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg  
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 Lys Gly Pro

<210> 3095  
 <211> 519  
 <212> DNA  
 <213> Homo sapiens

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<210> 3096  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 3096  
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 Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu  
 50 55 60  
 Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp  
 65 70 75 80  
 Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro  
 85 90 95  
 Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val  
 100 105 110  
 Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln  
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 Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro  
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 Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Val Ala Gln  
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<210> 3097  
 <211> 4953  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3098

&lt;211&gt; 1359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3098

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Gly	Pro	Ser	Arg	Gly	Ser	Gly	Gly	Gly	Gly	Arg	Gly	Gly	Leu	Arg	Ala
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Asp	Gly	Arg	Ala	Pro	Gly	Leu	Arg	Gly	Leu	Gly	Ala	Ala	Pro	His	Cys
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Pro	Ala	Gly	Leu	Gly	Pro	Gly	Ala	Met	Ser	Gly	Gly	Gly	Gly	Gly	Gly

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Gly	Ser	Ala	Pro	Ser	Arg	Phe	Ala	Asp	Tyr	Phe	Val	Ile	Cys	Gly
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Tyr	Ile	Gln	Ala	Ser	Lys	Ala	Arg	Asp	Gly	Ala	Ser	Pro	Phe	Ile
		115					120					125		Ser
Ser	Thr	Thr	Glu	Gly	Glu	Asn	Phe	Glu	Gln	Thr	Pro	Leu	Arg	Arg
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Phe	Lys	Ser	Lys	Val	Leu	Ala	Arg	Tyr	Pro	Glu	Asn	Val	Glu	Trp
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Pro	Phe	Asp	Gln	Asp	Ala	Val	Gly	Met	Leu	Cys	Met	Pro	Lys	Gly
			165					170						Leu
Ala	Phe	Lys	Thr	Gln	Ala	Asp	Pro	Arg	Glu	Pro	Gln	Phe	His	Ala
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	195					200						205		Thr
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Leu	Tyr	His	Met	His	Asn	Ala	Glu	Tyr	Asp	Val	Leu	His	Ala	Pro
225					230					235				Pro
Ala	Asp	Asp	Arg	Asp	Gln	Ser	Ser	Met	Glu	Asp	Gly	Glu	Asp	Thr
			245						250				255	Pro
Val	Thr	Lys	Leu	Gln	Arg	Phe	Asn	Ser	Tyr	Asp	Ile	Ser	Arg	Asp
			260					265					270	Thr
Leu	Tyr	Val	Ser	Lys	Cys	Ile	Cys	Leu	Ile	Thr	Pro	Met	Ser	Phe
	275						280					285		Met
Lys	Ala	Cys	Arg	Ser	Val	Pro	Gly	Gln	Leu	His	Gln	Ala	Val	Thr
	290					295					300			Ser
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Tyr	Glu	Val	Pro	Leu	Pro	Pro	Pro	Gly	Arg	Ser	Leu	Lys	Phe	Ser
			325					330					335	Gly
Val	Tyr	Trp	Pro	Ile	Ile	Cys	Gln	Arg	Pro	Ser	Thr	Asn	Glu	Leu
		340					345						350	Pro
Leu	Phe	Asp	Phe	Pro	Val	Lys	Glu	Val	Phe	Glu	Leu	Leu	Gly	Val
	355						360				365			Glu
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Thr	Ala	Leu	Met	Phe	Pro	Phe	Gln	Trp	Gln	His	Val	Tyr	Val	Pro
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Leu	Pro	Ala	Ser	Leu	Leu	His	Phe	Leu	Asp	Ala	Pro	Val	Pro	Tyr
		420						425				430		Leu
Met	Gly	Leu	His	Ser	Asn	Gly	Leu	Asp	Asp	Arg	Ser	Lys	Leu	Glu
	435					440						445		Leu
Pro	Gln	Glu	Ala	Asn	Leu	Cys	Phe	Val	Asp	Ile	Asp	Asn	His	Phe
	450					455					460			Ile
Glu	Leu	Pro	Glu	Asp	Leu	Pro	Gln	Phe	Pro	Asn	Lys	Leu	Glu	Phe
465					470					475				Val
Gln	Glu	Val	Ser	Glu	Ile	Leu	Met	Ala	Phe	Gly	Ile	Pro	Pro	Glu
			485						490				495	Gly
Asn	Leu	His	Cys	Ser	Glu	Ser	Ala	Ser	Lys	Leu	Lys	Arg	Leu	Arg
														Ala

2314



930	935	940
Asn Ile Gly Glu Ile Lys Thr Asp Val Gly Lys Ala Arg Ala Trp Val		
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Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		960
	965	970
Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		975
	980	985
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		990
	995	1000
Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		1005
	1010	1015
Leu Ile Pro Tyr His Ile Leu Ile Val Pro Ser Lys Lys Leu Gly Gly		1020
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Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		1040
	1045	1050
Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		1055
	1060	1065
Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		1070
	1075	1080
Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		1085
	1090	1095
Asn Glu Ile Thr Gly His Thr Tyr Lys Phe Pro Cys Gly Arg Trp Leu		1100
1105	1110	1115
Gly Lys Gly Met Asp Asp Gly Ser Leu Glu Arg Ile Leu Val Gly Glu		1120
	1125	1130
Leu Leu Thr Ser Gln Pro Glu Val Asp Glu Arg Pro Cys Arg Thr Pro		1135
	1140	1145
Pro Leu Gln Gln Ser Pro Ser Val Ile Arg Arg Leu Val Thr Ile Ser		1150
	1155	1160
Pro Asn Asn Lys Pro Lys Leu Asn Thr Gly Gln Ile Gln Glu Ser Ile		1165
	1170	1175
Gly Glu Ala Val Asn Gly Ile Val Lys His Phe His Lys Pro Glu Lys		1180
1185	1190	1195
Glu Arg Gly Ser Leu Thr Leu Leu Leu Cys Gly Glu Cys Gly Leu Val		1200
	1205	1210
Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu		1215
	1220	1225
Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr		1230
	1235	1240
Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		1245
	1250	1255
Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala Ile Asn Asn Thr		1260
1265	1270	1275
Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		1280
	1285	1290
Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		1295
	1300	1305
Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		1310
	1315	1320
His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		1325
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 <212> DNA  
 <213> Homo sapiens

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&lt;211&gt; 2623

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3101

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3103

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 120  
 ccaaaaggga aggagatagt aagcctgctg gaaagaaaca tcaccgtgac aatgtacatc  
 180  
 accatcgga cccggaactt gcagaaatat gtgagccgca cttcggttgt gtttgtctcc  
 240  
 atctccttca ttgtcctgat gatcatttcc ctgcattggc tctctcttta ttacatccag  
 300  
 aggtttcgat atgcaaatgc cagggatagg aaccagcgcc gactggggga tgcagcaaag  
 360  
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 420  
 gattttgaca actgtgcagt ttgtattgaa gggatagaag ccaatgacgt tgtccggatc  
 480

ctgccctgcc ggcattcttt ccacaagtc tgtgttgacc cctggcttct agaccatcgt  
 540  
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<210> 3114  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 3114  
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 20 25 30  
 Ile Val Ala Ile Met Ile Pro Glu Pro Lys Gly Lys Glu Ile Val Ser  
 35 40 45  
 Leu Leu Glu Arg Asn Ile Thr Val Thr Met Tyr Ile Thr Ile Gly Thr  
 50 55 60  
 Arg Asn Leu Gln Lys Tyr Val Ser Arg Thr Ser Val Val Phe Val Ser  
 65 70 75 80  
 Ile Ser Phe Ile Val Leu Met Ile Ile Ser Leu Ala Trp Leu Val Phe  
 85 90 95  
 Tyr Tyr Ile Gln Arg Phe Arg Tyr Ala Asn Ala Arg Asp Arg Asn Gln  
 100 105 110  
 Arg Arg Leu Gly Asp Ala Ala Lys Lys Ala Ile Ser Lys Leu Gln Ile  
 115 120 125  
 Arg Thr Ile Lys Lys Gly Asp Lys Glu Thr Glu Ser Asp Phe Asp Asn  
 130 135 140  
 Cys Ala Val Cys Ile Glu Gly Tyr Lys Pro Asn Asp Val Val Arg Ile  
 145 150 155 160  
 Leu Pro Cys Arg His Leu Phe His Lys Ser Cys Val Asp Pro Trp Leu  
 165 170 175  
 Leu Asp His Arg Thr Cys Pro Met Cys Lys Met Asn Ile Leu Lys Ala  
 180 185 190  
 Leu Gly Ile Pro Pro Asn Ala Asp Cys Met Asp Asp Phe Ala Thr Asp  
 195 200 205  
 Phe Glu  
 210

<210> 3115  
 <211> 1366  
 <212> DNA  
 <213> Homo sapiens

<400> 3115  
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 120  
 gcagaaaaga tggaaaaaag gacatgtgca ctctgcccc aagatgtcga atataatgtc  
 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca  
 240  
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 300  
 tcagtaaaga aagaaatcca gagaggaagg aagttgaaat gcaaattttg tcataaaaga  
 360  
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 420  
 aagaaggacg acgcagttcc acagtctgat ggagttcgag gaatttataa actgctttgc  
 480  
 cagcaacatg ctcaattccc gatcatcgct caaagtggta aattttcagg agtgaaaaga  
 540  
 aaaagaggaa ggaagaaacc cctctcaggc aatcatgtac agccaccga aacaatgaaa  
 600  
 tgtaatacat tcataagaca agtgaaagaa gagcatggca gacacacaga tgcaactgtg  
 660  
 aaagttcctt ttcttaagaa atgcaagnga agcaggactt cttaattact tacttgaaga  
 720  
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc  
 780  
 agactatgaa gaaatcggga gtgcactttt tgactgtaga ttgttcgaag acacatttgt  
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 900  
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 1080  
 aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tcctgtttct  
 1140  
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 1200  
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 1260  
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 1320  
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 1366

<210> 3116

<211> 191

<212> PRT

<213> Homo sapiens

<400> 3116

Met	Glu	Lys	Arg	Thr	Cys	Ala	Leu	Cys	Pro	Lys	Asp	Val	Glu	Tyr	Asn
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Val	Leu	Tyr	Phe	Ala	Gln	Ser	Glu	Asn	Ile	Ala	Ala	His	Glu	Asn	Cys
			20					25				30			
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
			35				40				45				
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

50	55	60
Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
145	150	155
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		160
	165	170
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		175
	180	185
		190

&lt;210&gt; 3117

&lt;211&gt; 1373

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3117

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agcccagggg gcattcaacc ccatgtttct agaactctgt tctgctgct gctgttggca
120
gcctcagcct ggggggtcac cctgagcccc aaagactgcc aggtgttcg ctcagaccat
180
ggcagctcca tctcctgtca accacctgcc gaaatccccg gctacctgcc agccgacacc
240
gtgcacctgg ccgtggaatt cttcaacctg accacctgc cagccaacct cctccagggc
300
gcctctaagc tccaagaatt gcacctctcc agcaatgggc tggaaagcct ctcgcccga
360
ttctgcggc cagtgcgcga gctgaggggt ctggatctaa cccgaaacgc cctgaccggg
420
ctgcccccg gcctcttcca ggcctcagcc accctggaca ccttggtatt gaaagaaaac
480
cagctggagg tctggaggt ctgctggcta cacggcctga aagctctggg gcatctggac
540
ctgtctggga accgcctccg gaaactgccc ccgggctgc tggccaactt caccctctg
600
cgcacccttg accttgggga gaaccagttg gagaccttg cacctgacct cctgaggggt
660
ccgtgcaat tagaacggct acatctagaa ggcaacaaat tgcaagtact gggaaaagat
720
ctctcttg cgcagccgga cctgcgtac ctcttctga gcggcaacaa gctggccagg
780
gtggcagccg gtgccttcca gggcctgcgg cagctggaca tgetggacct ctccaataac
840
tactggcca gcgtgcccga ggggctctgg gcatccctag ggcagccaaa ctgggacatg
900

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cgggatggct tcgacatctc cggcaacccc tggatctgtg accagaacct gagcgacctc  
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 1020  
 gggcctgaag ccgtgaaggg ccagacgctc ctggcagtgg ccaagtccca gtgagaccag  
 1080  
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 1260  
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 1373

<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

Val	Thr	Leu	Ser	Pro	Lys	Asp	Cys	Gln	Val	Phe	Arg	Ser	Asp	His	Gly
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Ser	Ser	Ile	Ser	Cys	Gln	Pro	Pro	Ala	Glu	Ile	Pro	Gly	Tyr	Leu	Pro
			20					25					30		
Ala	Asp	Thr	Val	His	Leu	Ala	Val	Glu	Phe	Phe	Asn	Leu	Thr	His	Leu
			35				40					45			
Pro	Ala	Asn	Leu	Leu	Gln	Gly	Ala	Ser	Lys	Leu	Gln	Glu	Leu	His	Leu
			50			55					60				
Ser	Ser	Asn	Gly	Leu	Glu	Ser	Leu	Ser	Pro	Glu	Phe	Leu	Arg	Pro	Val
65					70					75				80	
Pro	Gln	Leu	Arg	Val	Leu	Asp	Leu	Thr	Arg	Asn	Ala	Leu	Thr	Gly	Leu
				85					90					95	
Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
			100					105					110		
Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
		115					120					125			
Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
		130				135					140				
Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
145					150					155				160	
Gly	Glu	Asn	Gln	Leu	Glu	Thr	Leu	Pro	Pro	Asp	Leu	Leu	Arg	Gly	Pro
				165					170					175	
Leu	Gln	Leu	Glu	Arg	Leu	His	Leu	Glu	Gly	Asn	Lys	Leu	Gln	Val	Leu
			180					185					190		
Gly	Lys	Asp	Leu	Leu	Leu	Pro	Gln	Pro	Asp	Leu	Arg	Tyr	Leu	Phe	Leu
		195					200						205		
Ser	Gly	Asn	Lys	Leu	Ala	Arg	Val	Ala	Ala	Gly	Ala	Phe	Gln	Gly	Leu
		210				215									
Arg	Gln	Leu	Asp	Met	Leu	Asp	Leu	Ser	Asn	Asn	Ser	Leu	Ala	Ser	Val
225					230					235				240	
Pro	Glu	Gly	Leu	Trp	Ala	Ser	Leu	Gly	Gln	Pro	Asn	Trp	Asp	Met	Arg

```

                245                250                255
Asp Gly Phe Asp Ile Ser Gly Asn Pro Trp Ile Cys Asp Gln Asn Leu
                260                265                270
Ser Asp Leu Tyr Arg Trp Leu Gln Ala Gln Lys Asp Lys Met Phe Ser
                275                280                285
Gln Asn Asp Thr Arg Cys Ala Gly Pro Glu Ala Val Lys Gly Gln Thr
                290                295                300
Leu Leu Ala Val Ala Lys Ser Gln
305                310

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<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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120
tacgtggagg tggccccctg ttccacagag gagatgagcc gagtgctgat ggggggcacc
180
ttggggccgca gtggcatgtc cctccacccc tgcaagctgc cctgcctctc accacctacc
240
tacaccacct tccaagccac cccaacgctc attcccacgg agacggcagc tctatacccc
300
tcttcagcac tgctcccagc tgccagggtg cctgctgccc ccacccctgt tgctactat
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420
aacgcgt
427

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<210> 3120

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3120

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Val His Met Val Leu Asn Gln Gln Gly Arg Pro Ser Gly Asp Ala Phe
1          5          10          15
Ile Gln Met Thr Ser Ala Glu Arg Ala Leu Ala Ala Ala Gln Arg Cys
20          25          30
His Lys Lys Val Met Lys Glu Arg Tyr Val Glu Val Val Pro Cys Ser
35          40          45
Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser
50          55          60
Gly Met Ser Pro Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr
65          70          75          80
Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala
85          90          95
Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala
100         105         110
Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr

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<210> 3121
<211> 284
<212> DNA
<213> Homo sapiens
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<210> 3122
<211> 91
<212> PRT
<213> Homo sapiens
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<210> 3123
<211> 344
<212> DNA
<213> Homo sapiens
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2339

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 300  
 gaggtgcagg cagctcccaa ggagaagtct gagcagaaaa aagc  
 344

<210> 3124  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 3124  
 Met Arg Ser Arg Gln Glu Met Lys Asn Pro Ile Ser Asn Lys Lys Arg  
 1 5 10 15  
 Lys Lys Ala Ala Gln Val Thr Phe Arg Lys Thr Leu Glu Lys Glu Ala  
 20 25 30  
 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys  
 35 40 45  
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln  
 50 55 60  
 His Val Leu Phe Leu Ser Lys Asn Gln Ala Ile Arg Gln Pro Glu Val  
 65 70 75 80  
 Gln Ala Ala Pro Lys Glu Lys Ser Glu Gln Lys Lys  
 85 90

<210> 3125  
 <211> 647  
 <212> DNA  
 <213> Homo sapiens

<400> 3125  
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 120  
 ggtcagcagg cagtttagtt gtgggagtat ttccaatttg catgaatgaa acatggacaa  
 180  
 ataagataag gctggctcca gggaagtaat tccccagtt cccctgagcc ttggatctgg  
 240  
 aaaactgcag cccatcctgg aattagggaa catcacaaaa cgtactgggg agaactcccc  
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 360  
 ctatggctaa gacagaaaaa caaaggaaaa aaagtctctc ccaaacacac acataagcaa  
 420  
 aacccatctt cctgtgttct ctgccaagag agctggagca aaagagatga gtttgagact  
 480  
 ctgattcatc catcaagaca aataaactca gtctatggag gtttagcagg caatttgtga  
 540  
 agcaaacaaa agttgagttt tggaaagggg ctctgaagaa aatgaagatg acataaccagg  
 600  
 aatttaactt catgacaaga agagaaagtg actcactctt gacgcgt  
 647

<210> 3126

<211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 3126  
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 Phe Gln Asn Ser Thr Phe Val Cys Phe Thr Asn Cys Pro Ala Asn Leu  
 20 25 30  
 His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr  
 35 40 45  
 His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly  
 50 55 60  
 Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser  
 65 70 75 80  
 Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg  
 85 90 95  
 Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe  
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 Cys Asp Val Pro  
 115

<210> 3127  
 <211> 2218  
 <212> DNA  
 <213> Homo sapiens

<400> 3127  
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 120  
 actttggaga aattgaagag cctagggtt tttgggtgc aagtcccaga agaatatggt  
 180  
 ggcttgggt tctccaacac catgtactca agactagggg agatcatcag catggatggg  
 240  
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 360  
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 540  
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 600  
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 660  
 aacaccaaga tacctgtgga aaacatcctt ggagaggtcg gagatgggtt taaggtggcc  
 720  
 atgaacatcc tcaacagcgg ccggttcagc atgggcagcg tcgtgggtgg gctgctcaag  
 780

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 840  
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 960  
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 1380  
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 1620  
 cagattaaga aagtgtccca gcagatcctt gagaagcgag cctatatctg tgcccacct  
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 1920  
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 1980  
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 2100  
 agctctgtct gggtcattca tttaaactag aagcagaggc acttaaaaca tgtaccagga  
 2160  
 accatttaac aaagaatata aaatgtcaca atctgtgtac tgttaaaaaa aaaaaaaa  
 2218

&lt;210&gt; 3128

&lt;211&gt; 565

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3128

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Xaa Glu Val Ser Gln Asp Glu Leu Asn Glu Ile Asn Gln Phe Leu Gly
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Pro Val Glu Lys Phe Phe Thr Glu Glu Val Asp Ser Arg Lys Ile Asp
          20           25           30
Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu
          35           40           45
Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe
          50           55           60
Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly
65           70           75           80
Ser Ile Thr Val Thr Leu Ala Ala His Gln Ala Ile Gly Leu Lys Gly
          85           90           95
Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys
          100          105          110
Leu Ala Ser Gly Glu His Ile Ala Ala Phe Cys Leu Thr Glu Pro Ala
          115          120          125
Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu
          130          135          140
Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn
145          150          155          160
Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val
          165          170          175
Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu
          180          185          190
Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly
          195          200          205
Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile
          210          215          220
Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala
225          230          235          240
Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala
          245          250          255
Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr
          260          265          270
Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu
          275          280          285
Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr
          290          295          300
Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser
305          310          315          320
Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln
          325          330          335
Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg
          340          345          350
Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile
          355          360          365
Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly
          370          375          380
Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys
385          390          395          400
Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg
          405          410          415
Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly

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420					425					430						
Val	Val	His	Pro	Ser	Leu	Ala	Asp	Ser	Ala	Asn	Lys	Phe	Glu	Glu	Asn	
435					440					445						
Thr	Tyr	Cys	Phe	Gly	Arg	Thr	Val	Glu	Thr	Leu	Leu	Leu	Arg	Phe	Gly	
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Lys	Thr	Ile	Met	Glu	Glu	Gln	Leu	Val	Leu	Lys	Arg	Val	Ala	Asn	Ile	
465					470					475					480	
Leu	Ile	Asn	Leu	Tyr	Gly	Met	Thr	Ala	Val	Leu	Ser	Arg	Ala	Ser	Arg	
485					490					495						
Ser	Ile	Arg	Ile	Gly	Leu	Arg	Asn	His	Asp	His	Glu	Val	Leu	Leu	Ala	
500					505					510						
Asn	Thr	Phe	Cys	Val	Glu	Ala	Tyr	Leu	Gln	Asn	Leu	Phe	Ser	Leu	Ser	
515					520					525						
Gln	Leu	Asp	Lys	Tyr	Ala	Pro	Glu	Asn	Leu	Asp	Glu	Gln	Ile	Lys	Lys	
530					535					540						
Val	Ser	Gln	Gln	Ile	Leu	Glu	Lys	Arg	Ala	Tyr	Ile	Cys	Ala	His	Pro	
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Leu	Asp	Arg	Thr	Cys												
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<210> 3129
<211> 1964
<212> DNA
<213> Homo sapiens
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<400> 3129
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120
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360
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420
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660
tttttacttt gcataaagta gatacttggc catatgtagt tccaaggaga agtcagagtt
720
ccacctttgg agtcctttcct tctgattcac gattttcttt caacaatttt ccacttagga
780
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840

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 960  
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 1080  
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 1140  
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 1260  
 gccatggaat tcattgctgc cactgagggtg gctgtcatag gcttcttcca ggatttagaa  
 1320  
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 1380  
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 1800  
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 1860  
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 1964

<210> 3130

<211> 273

<212> PRT

<213> Homo sapiens

<400> 3130

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Cys	Glu	Leu	Ala	Ala	Glu	Val	Ala	Ala	Glu	Val	Glu	Lys	Ser	Ser	Asp
			20				25					30			
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
			35				40					45			
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
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180
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240
ggacacaaaa tcattttgtg ttgggtctcg aaagagggtc gtgggtcccgc acggatgccc
300
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360
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420
cttcacacac acggcagcac cggcaccgcg gagggaggaa acatgtcccg gctgtctctc
480
acccggtcgc ctgtgtctcc cctgggtgcc cagggcattc ccctgccagc acaactcaca
540
aaatccaatg cgctgtcca cattgatgtg ggcggccaca tgtacaccag cagcctggcc
600

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accctcacca aataccctga atccagaatc ggaagacttt ttgatggtac agagcccatt  
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 gtttttgaca gtctcaaaca gcactatttc attgacagag atggacagat gttcagatat  
 720  
 atcttgaatt ttctacgaac atccaaactc ctcattcctg atgatttcaa ggactacact  
 780  
 ttgttatatg aagaggcaaa atattttcag cttcagccca tgttggtgga gatggaaaga  
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 1440  
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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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Gly	Ser	Thr	Gly	Thr	Ala	Glu	Gly	Gly	Asn	Met	Ser	Arg	Leu	Ser	Leu
			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
			35				40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
			50			55					60				
His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
65					70					75				80	
Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
			85					90					95		
Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp	Gly	Gln	Met	Phe	Arg	Tyr
			100				105					110			
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

115	120	125
Lys Asp Tyr Thr Leu Leu Tyr	Glu Glu Ala Lys Tyr Phe Gln Leu Gln	
130	135	140
Pro Met Leu Leu Glu Met Glu Arg Trp Lys Gln Asp Arg Glu Thr Gly		
145	150	155
Arg Phe Ser Arg Pro Cys Glu Cys Leu Val Val Arg Val Ala Pro Asp		
165	170	175
Leu Gly Glu Arg Ile Thr Leu Ser Gly Asp Lys Ser Leu Ile Glu Glu		
180	185	190
Val Phe Pro Glu Ile Gly Asp Val Met Cys Asn Ser Val Asn Ala Gly		
195	200	205
Trp Asn His Asp Ser Thr His Val Ile Arg Phe Pro Leu Asn Gly Tyr		
210	215	220
Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly		
225	230	235
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe		
245	250	255
Ser Glu Tyr Val Leu Arg Arg Glu Leu Arg Arg Thr Pro Arg Val Pro		
260	265	270
Ser Val Ile Arg Ile Lys Gln Glu Pro Leu Asp		
275	280	

&lt;210&gt; 3133

&lt;211&gt; 621

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3133

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120
gtctgatgcc tgccaagggc aagccaggcg tggagcagcg agaggtgtgt gaggtagcat
180
ggggtccagc catcgcacac agcaggcagc ctggctgcag tggggcaggc agctccacgc
240
gcagtcattg ctcctgtga agctgcagct ggaccaggcg tactacaagc agcttccact
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600
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621

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&lt;210&gt; 3134

&lt;211&gt; 51

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3134

Ala	Arg	Asp	Ile	Phe	Gln	Arg	Cys	Leu	Cys	Tyr	Thr	Ser	Phe	Ser	Pro
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Ala	Val	Arg	Gln	Val	Pro	Ser	Ser	Cys	Ala	Ala	Ser	Arg	Lys	Asn	Glu
		20					25					30			
Thr	Glu	Val	Lys	Ser	Glu	Glu	Gly	Pro	Gly	Trp	Thr	Ile	Leu	Arg	Asp
	35					40					45				
Asp	Phe	Met													
	50														

<210> 3135

<211> 3166

<212> DNA

<213> Homo sapiens

<400> 3135

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120
gaggaagcag agataaagac tcacattggc accaagcaca caggggaaga caggaagacc
180
cccagcgaat caaatagccc ctcttcatcc tccctctcag ctctgagtga ttcagccaac
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360
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600
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660
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720
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780
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960
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1080

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 2700

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 3060  
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<210> 3136

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3136

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			20					25				30			
Lys	Cys	Pro	Ile	Cys	Gln	Thr	Val	Lys	Ala	Asn	Gln	Leu	Glu	Leu	Glu
		35					40				45				
Thr	His	Thr	Arg	Glu	His	Arg	Leu	Gly	Asn	His	Tyr	Lys	Cys	Asp	Gln
	50				55					60					
Cys	Gly	Tyr	Leu	Ser	Lys	Thr	Ala	Asn	Lys	Leu	Ile	Glu	His	Val	Arg
65				70					75					80	
Val	His	Thr	Gly	Ser	Gly	Pro	Phe	His	Trp	Asp	Gln	Cys	Ser	Tyr	Ser
			85					90						95	
Cys	Lys	Arg	Lys	Asp	Asn	Leu	Asn	Leu	His	Lys	Lys	Leu	Lys	His	Ala
			100				105					110			
Pro	Arg	Gln	Thr	Phe	Ser	Cys	Glu	Glu	Cys	Leu	Phe	Lys	Thr	Thr	His
		115					120					125			
Pro	Phe	Val	Phe	Ser	Arg	His	Val	Lys	Lys	His	Gln	Ser	Gly	Asp	Cys
	130					135					140				
Pro	Glu	Glu	Asp	Lys	Lys	Gly	Leu	Cys	Pro	Ala	Pro	Lys	Glu	Pro	Ala
145				150					155					160	
Gly	Pro	Gly	Ala	Pro	Leu	Leu	Val	Val	Gly	Ser	Ser	Arg	Asn	Leu	Leu
			165				170						175		
Ser	Pro	Leu	Ser	Val	Met	Ser	Ala	Ser	Gln	Ala	Leu	Gln	Thr	Val	Ala
		180					185					190			
Leu	Ser	Ala	Ala	His	Gly	Ser	Ser	Ser	Glu	Pro	Asn	Leu	Ala	Leu	Lys
		195				200					205				
Ala	Leu	Ala	Phe	Asn	Gly	Ser	Pro	Leu	Arg	Phe	Asp	Lys	Tyr	Arg	Asn
	210				215					220					
Ser	Asp	Phe	Ala	His	Leu	Ile	Pro	Leu	Thr	Met	Leu	Tyr	Pro	Lys	Asn
225				230					235					240	
His	Leu	Asp	Leu	Thr	Phe	His	Pro	Pro	Arg	Pro	Gln	Thr	Ala	Pro	Pro

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Ser Ile Pro Ser Pro Lys His Ser Phe Leu Ala Tyr Leu Gly Leu Arg					
	260		265		270
Glu Arg Ala Glu Thr Val					
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 <211> 5773  
 <212> DNA  
 <213> Homo sapiens

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 420  
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 720  
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 780  
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 840  
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&lt;210&gt; 3138

&lt;211&gt; 977

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3138

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Pro

&lt;210&gt; 3139

&lt;211&gt; 503

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3139

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&lt;210&gt; 3140

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3140

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Tyr	Ser	Ala	Leu	Pro	Arg	Gly	Leu	Gly	Cys	Ser	Leu	Leu	Phe	Ile	Pro				
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Gly	Phe	Met	Ala	Leu	Tyr	Ser	Leu	Leu	Pro	His	Lys	Glu	Leu
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Ile	Ile	Tyr	Ala	Phe	Pro	Met	Leu	Asn	Ile	Thr	Ala	Ala	Arg
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			115										

&lt;210&gt; 3141

&lt;211&gt; 1815

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3141

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<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

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Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
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Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
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Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
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Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
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Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
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Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
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225	230	235
Thr Thr Leu Arg Tyr	Pro Gly Tyr Met Asn Asn	Asp Leu Ile Gly Leu
245	250	255
Ile Ala Ser Leu Ile	Pro Thr Pro Arg Leu His	Phe Leu Met Thr Gly
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290	295	300
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305	310	315
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325	330	335
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Ser Ala His Arg Val	Ser Gly Leu Met Met	Ala Asn His Thr Ser Ile
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Ser Ser Leu Phe Glu	Arg Thr Cys Arg Gln	Tyr Asp Lys Leu Arg Lys
385	390	395
Arg Glu Ala Phe Leu	Glu Gln Phe Arg Lys	Glu Asp Met Phe Lys Asp
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Asn Phe Asp Glu Met	Asp Thr Ser Arg Glu	Ile Val Gln Gln Leu Ile
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Gln Glu Gln		
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&lt;210&gt; 3143

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3143

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&lt;210&gt; 3144

<211> 81  
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 <213> Homo sapiens

<400> 3144  
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 35 40 45  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3146  
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<400> 3146  
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 35 40 45  
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser



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Gln Met Thr Ser Gly	Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
	85	90	95	
Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
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Pro Asn Val Val Ser	Ser Arg Arg Arg Leu Thr	Pro Arg Arg Gly Trp		
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&lt;210&gt; 3147

&lt;211&gt; 3106

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3147

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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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			20					25					30		
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys
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Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala
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Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro
			85					90						95	
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp
			100					105					110		
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr
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Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro
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Thr	Leu	Ile	Thr	Ala	Phe	Val	Leu	Ala	Thr	Ser	Gln	Ala	Gln	Ala	Gly
			165					170					175		
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		180					185					190			
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
	195					200					205				
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	210				215					220					
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225				230					235					240	
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
			245				250						255		
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro



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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
			35				40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
			50			55					60				
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65					70				75					80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
				85					90					95	
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
		115				120						125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
		130				135						140			
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150				155					160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
				165				170						175	
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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<400> 3153

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&lt;210&gt; 3154

&lt;211&gt; 65

&lt;212&gt; PRT



<213> Homo sapiens

<400> 3154

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Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
      35           40           45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
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Gly
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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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      20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
      35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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	85	90	95	
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100	105	110	
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115	120	125	
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130	135	140	
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
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Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				
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Ser Leu				

&lt;210&gt; 3157

&lt;211&gt; 903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3157

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<212> PRT  
<213> Homo sapiens

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Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr  
35 40 45  
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Glu Ser Val Pro Thr Leu Leu Pro Glu Glu Ala Gln  
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<210> 3159  
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<212> DNA  
<213> Homo sapiens

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2280  
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<210> 3160

<211> 431

<212> PRT

<213> Homo sapiens

<400> 3160

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			20					25					30		
Glu	Lys	Leu	Leu	Glu	Lys	Tyr	Met	Asp	Glu	Asp	Gly	Glu	Trp	Trp	Ile
		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75					80
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
				85					90					95	
Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
			100					105					110		
Leu	Pro	Ser	Ile	Gly	Gln	Asn	Leu	Gly	Ala	His	Trp	Gly	Arg	Tyr	Arg
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Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
	130					135					140				
Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
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Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
			165						170					175	
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Ser	Ala	Cys	Pro	Pro	Ser	Phe	Gly	Gly	Gly	Cys	Arg	Glu	Asn	Leu	Cys
225					230					235					240
Tyr	Lys	Glu	Gly	Ser	Asp	Arg	Tyr	Tyr	Pro	Pro	Arg	Glu	Glu	Glu	Thr
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		260						265					270		
Thr	Arg	Ser	Asp	Asp	Ser	Ser	Arg	Asn	Glu	Val	Ile	Ser	Ala	Gln	Gln
		275					280						285		
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	290					295					300				
Gly	Thr	Thr	Cys	Asn	Arg	Tyr	Glu	Cys	Pro	Ala	Gly	Cys	Leu	Asp	Ser
305					310					315					320
Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
			325						330					335	
Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
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<210> 3162
<211> 386
<212> PRT
<213> Homo sapiens
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<210> 3163  
 <211> 1075  
 <212> DNA  
 <213> Homo sapiens

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<210> 3164  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 3164

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          20           25           30
Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser
          35           40           45
Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly
          50           55           60
Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala
65           70           75           80
Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val
          85           90

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&lt;210&gt; 3165

&lt;211&gt; 2413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3165

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<210> 3166

<211> 717

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3166

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 35          40          45
Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
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Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
 65          70          75          80
Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
 85          90          95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
 100          105          110
Leu Leu Tyr Gly Met Ala Leu Val Arg Phe Val Asn Leu Ile Ser Glu
 115          120          125
Arg Lys Thr Lys Phe Ala Lys Val Pro Leu Lys Cys Leu Ala Gln Glu
 130          135          140
Val Asn Ile Pro Asp Trp Ile Val Asp Leu Arg His Glu Leu Thr His
 145          150          155          160
Lys Lys Met Pro His Ile Asn Asp Cys Arg Arg Gly Cys Tyr Phe Val
 165          170          175
Leu Asp Trp Leu Gln Lys Thr Tyr Trp Cys Arg Gln Leu Glu Asn Ser
 180          185          190
Leu Arg Glu Thr Trp Glu Leu Glu Glu Phe Arg Glu Gly Ile Glu Glu
 195          200          205
Glu Asp Gln Glu Glu Asp Lys Asn Ile Val Val Asp Asp Ile Thr Glu
 210          215          220
Gln Lys Pro Glu Pro Gln Asp Asp Gly Lys Ser Thr Glu Ser Asp Val
 225          230          235          240
Lys Ala Asp Gly Asp Ser Lys Gly Ser Glu Glu Val Asp Ser His Cys
 245          250          255
Lys Lys Ala Leu Ser His Lys Glu Leu Tyr Glu Arg Ala Arg Glu Leu
 260          265          270
Leu Val Ser Tyr Glu Glu Glu Gln Phe Thr Val Leu Glu Lys Phe Arg
 275          280          285
Tyr Leu Pro Lys Ala Ile Lys Ala Trp Asn Asn Pro Ser Pro Arg Val
 290          295          300
Glu Cys Val Leu Ala Glu Leu Lys Gly Val Thr Cys Glu Asn Arg Glu
 305          310          315          320
Ala Val Leu Asp Ala Phe Leu Asp Asp Gly Phe Leu Val Pro Thr Phe
 325          330          335
Glu Gln Leu Ala Ala Leu Gln Ile Glu Tyr Glu Glu Asn Val Asp Leu
 340          345          350
Asn Asp Val Leu Val Pro Lys Pro Phe Ser Gln Phe Trp Gln Pro Leu
 355          360          365
Leu Arg Gly Leu His Ser Gln Asn Phe Thr Gln Ala Leu Leu Glu Arg
 370          375          380
Met Leu Ser Glu Leu Pro Ala Leu Gly Ile Ser Gly Ile Arg Pro Thr
 385          390          395          400
Tyr Ile Leu Arg Trp Thr Val Glu Leu Ile Val Ala Asn Thr Lys Thr
 405          410          415
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<210> 3167
<211> 2730
<212> DNA
<213> Homo sapiens
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480  
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960  
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1080  
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<213> Homo sapiens

<400> 3168

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&lt;211&gt; 5945

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&lt;400&gt; 3169

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&lt;400&gt; 3171

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Val	Ala	Gln	Tyr	Phe	Arg	Glu	Lys	Tyr	Thr	Leu	Gln	Leu	Lys	Tyr	Pro
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His	Leu	Pro	Cys	Leu	Gln	Val	Gly	Gln	Glu	Gln	Lys	His	Thr	Tyr	Leu
65					70				75						80
Pro	Leu	Glu	Val	Cys	Asn	Ile	Val	Ala	Gly	Gln	Arg	Cys	Ile	Lys	Lys
				85					90					95	
Leu	Thr	Asp	Asn	Gln	Thr	Ser	Thr	Met	Ile	Lys	Ala	Thr	Ala	Arg	Ser
			100					105					110		
Ala	Pro	Asp	Arg	Gln	Glu	Glu	Ile	Ser	Arg	Leu	Val	Arg	Ser	Ala	Asn
		115					120					125			
Tyr	Glu	Thr	Asp	Pro	Phe	Val	Gln	Glu	Phe	Gln	Phe	Lys	Val	Arg	Asp
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Glu	Met	Ala	His	Val	Thr	Gly	Arg								
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<210> 3175

<211> 948

<212> DNA

<213> Homo sapiens

<400> 3175

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 120  
 tgggtccgg aatcgccgc agccgtact gcgggaccca ctgcggatat ggctgtcttg  
 180  
 gctggatccc tggtgggccc cagagtagg tcggcagcgt tgctgggtgg caggtggctc  
 240  
 cagccccggg cctggctggg gttcccagac gcctggggcc tccccacccc gcagcaggcc  
 300  
 cggggcaagg ctgcgggaa tgagtatcag ccgagcaaca tcaaacgcaa gaacaagcac  
 360  
 ggctgggtcc ggcgcctgag cagccgggcc ggctgcagg tcatccttcg ccgaatgctc  
 420

aagggccgca agtcgctgag ccattgagga tcgcgacgca gtcggcgagg ccctcatgga  
 480  
 agcatcgccc tcgcctcgga ccttgccctgg cgctattttt gcagggagct ggggagcagg  
 540  
 aacgcctcgg acctgagtgc tctccatatt gtgggggtga agtctggatg ggagcttgcc  
 600  
 aagtcccttt ttaggccttt taattaggaa gcatttcgaa cctgcgcaac agaccaaaga  
 660  
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 720  
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 780  
 tatttcagaa tgtatctctc caagatgaga gctcattaaa agataattac aaagcttacc  
 840  
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 900  
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<210> 3176

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3176

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Ala	Leu	Leu	Gly	Gly	Arg	Trp	Leu	Gln	Pro	Arg	Ala	Trp	Leu	Gly	Phe
			20					25					30		
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
			35				40					45			
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
	50					55					60				
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
65					70					75				80	
Arg	Arg	Met	Leu	Lys	Gly	Arg	Lys	Ser	Leu	Ser	His				
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<210> 3177

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 3177

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 240  
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 300

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 480  
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 660  
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 720  
 aagaggccac tcagcatcca agacagcttc gtggaggatc cccagtggtg ccccgggccc  
 780  
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 960  
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 1380  
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 1857

<210> 3178



<211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 3178  
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 35 40 45  
 Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro  
 50 55 60  
 Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu  
 65 70 75 80  
 Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu  
 85 90 95  
 Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu  
 100 105 110  
 Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile  
 115 120 125  
 Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp  
 130 135 140  
 Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu  
 145 150 155 160  
 Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His  
 165 170 175  
 Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val  
 180 185 190  
 His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu  
 195 200 205  
 Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln  
 210 215 220  
 Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu  
 225 230 235 240  
 Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val  
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 Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val  
 260 265 270  
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<210> 3179  
 <211> 3447  
 <212> DNA  
 <213> Homo sapiens

<400> 3179  
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 120  
 taaatcatga tacaaccacc acaggcaatt accatcaa atattcccat gatttacaaa  
 180

tgtatcgctt atacagagga agttgcaaaa tccactgccag tacagacaca tccagtctaa  
240  
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300  
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360  
agacttcgag aggaatgcct ataagaaatc tcaaaaaggta tttgtttggg tgcagaaaca  
420  
aatgcaccct ccacatttgg atttttctcta gaagaatctg tggccaaatc tcttatccaa  
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660  
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720  
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1860  
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1920  
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1980  
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3360  
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<210> 3180

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3180

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			20				25					30			
Ala	Phe	Thr	Pro	Thr	Gly	Lys	Val	Lys	Leu	Thr	Phe	Val	Phe	Leu	Phe
			35				40					45			
Asn	Asn	Phe	Met	Ile	Asn	Lys	Glu	Leu	Gln	Leu	Glu	Thr	Lys	Ala	Asn
	50				55					60					
Ser	Arg	Asn	Ser	Leu	Thr	Pro	Ser	Cys	Pro	Met	Val	Phe	Met	Ile	Ala
65				70					75					80	
Cys	Tyr	Gln	Asn	Glu	Ala	Leu	Cys	Ser	Thr	Leu	Tyr	Ser	Lys	Ala	Phe
			85					90					95		
Tyr	Ala	Pro	Thr	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Ser	Ala	Leu	His	Thr
			100				105					110			
Gly	Arg	Lys	Thr	Ala	Ser	Ser	Tyr	Arg	Leu	Cys	Glu	Asn	Thr	Gln	
		115					120					125			

<210> 3181

<211> 287

<212> DNA

<213> Homo sapiens

<400> 3181

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120  
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287

<210> 3182

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3182

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Arg	Arg	Gln	Leu	Asp	Ala	Arg	Arg	Asn	Lys	Cys	Arg	Ile	Arg	Leu	Gly
			20				25					30			
Gly	His	Met	Lys	Gln	Gly	Gly	Leu	Leu	Lys	Asp	Gly	Trp	Ala	Ser	Pro